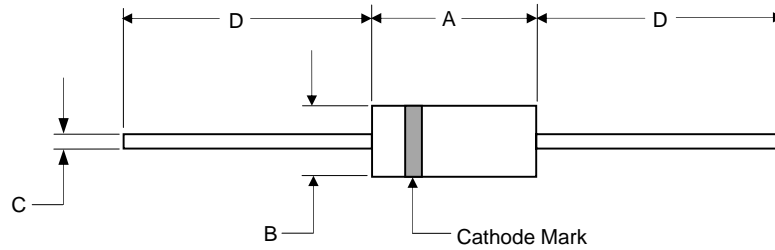


PACKAGE OUTLINES



DO-35

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	----	.166	----	4.20	
B	----	.079	----	2.00	∅
C	----	.020	----	0.52	∅
D	1.000	---	25.40	---	

DO-41

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.166	.205	4.10	5.20	
B	.080	.107	2.00	2.70	∅
C	.028	.034	.70	.90	∅
D	1.000	---	25.40	---	

A-405

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.166	.205	4.10	5.20	
B	.080	.107	2.00	2.70	∅
C	.021	.025	.53	.64	∅
D	1.000	---	25.40	---	

DO-15

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.230	.300	5.80	7.60	
B	.104	.140	2.60	3.60	∅
C	.026	.034	.70	.90	∅
D	1.000	---	25.40	---	

DO-7

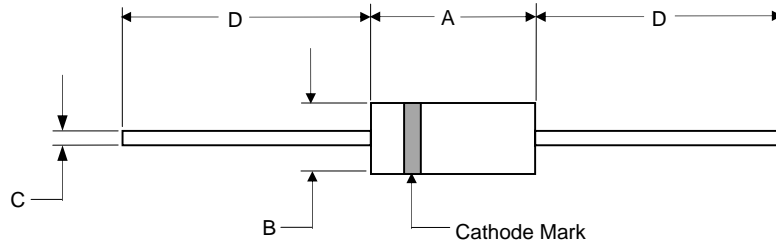
DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	----	.300	----	7.62	
B	----	.107	----	2.72	∅
C	.018	.022	0.46	0.56	∅
D	1.000	---	25.40	---	

DO-201AD

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	----	.370	----	9.50	
B	----	.250	----	6.40	∅
C	.048	.052	1.20	1.30	∅
D	1.000	---	25.40	---	

Note: Drawings Are Not To Scale

PACKAGE OUTLINES



R-1

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.116	.140	2.90	3.50	
B	.091	.102	2.30	2.60	
C	.020	.024	.50	.60	
D	.787	---	20.0	---	

DO-201AE

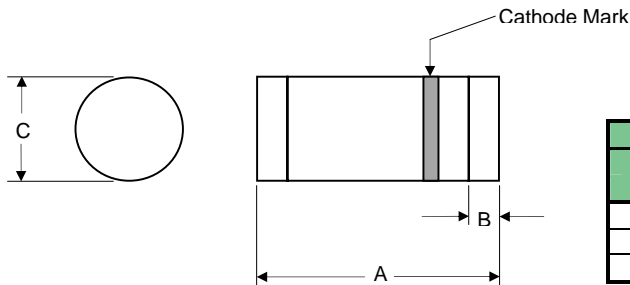
DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	----	.370	----	9.50	
B	----	.250	----	6.40	∅
C	.038	.042	.96	1.06	∅
D	1.000	---	25.40	---	

R-3

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	----	.160	----	4.10	
B	----	.160	----	4.10	∅
C	.040	.042	1.01	1.07	∅
D	1.000	---	25.40	---	

R-6

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.340	.360	8.60	9.10	
B	.340	.360	8.60	9.10	∅
C	.048	.052	1.20	1.30	∅
D	1.000	---	25.40	---	

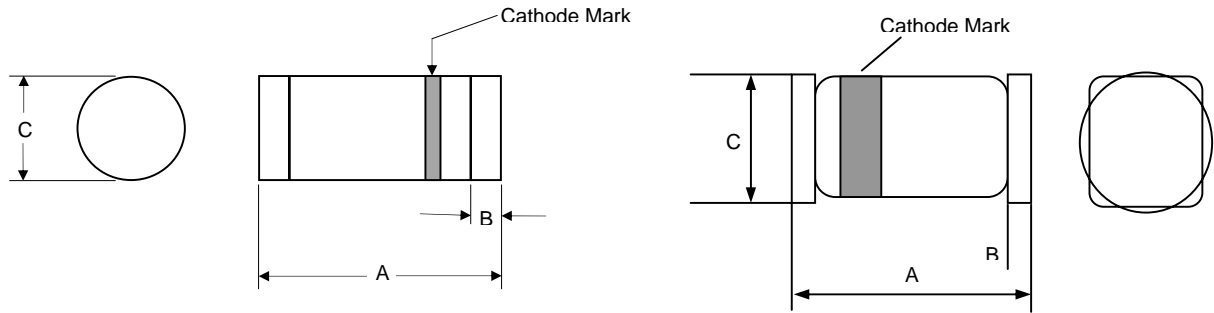


MELF

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.190	.205	4.80	5.20	
B	----	.022	----	0.55	Nominal
C	.095	.105	2.40	2.67	∅

Note: Drawings Are Not To Scale

PACKAGE OUTLINES

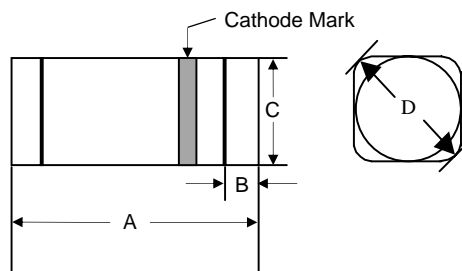


MINIMELF

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.134	.142	3.40	3.60	
B	.008	.016	0.20	0.40	
C	.055	.059	1.40	1.50	∅

MICROMELF

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.071	.079	1.80	2.00	
B	.004	.008	0.10	0.20	
C	.047	.051	1.20	1.30	∅



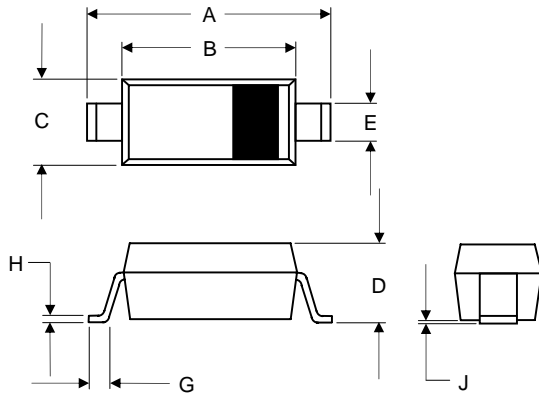
QUADRO MELF

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.130	.079	3.30	3.70	
B	.008	.008	0.20	0.40	
C	.055	.051	1.40	1.60	∅
D	.067		1.70		

Note: Drawings Are Not To Scale

PACKAGE OUTLINES

SOD123



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.140	.152	3.55	3.85	
B	.100	.112	2.55	2.85	
C	.055	.071	1.40	1.80	
D	-----	.053	-----	1.35	
E	.012	.03	0.30	0.78	
G	.006	-----	0.15	-----	
H	-----	.01	-----	0.25	
J	-----	.006	-----	0.15	

SOD323

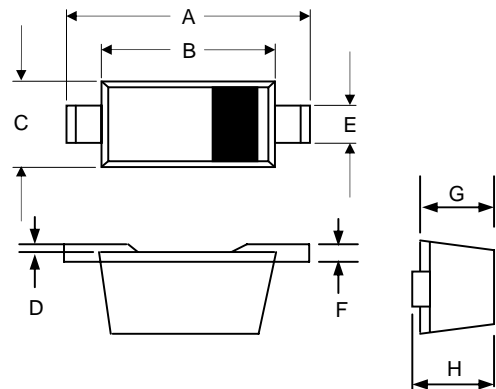
DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.090	.107	2.30	2.70	
B	.063	.071	1.60	1.80	
C	.045	.053	1.15	1.35	
D	.031	.045	0.80	1.15	
E	.010	.016	0.25	0.40	
G	.004	.018	0.10	0.45	
H	.004	.010	0.10	0.25	
J	-----	.006	-----	0.15	

SOD523

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.059	.067	1.50	1.70	
B	.043	.051	1.10	1.30	
C	.030	.033	0.75	0.85	
D	.001	.003	0.01	0.07	
E	.010	.014	0.25	0.35	
F	.003	.006	0.08	0.15	
G	.020	.028	0.50	0.70	
H	.020	.031	0.51	0.77	

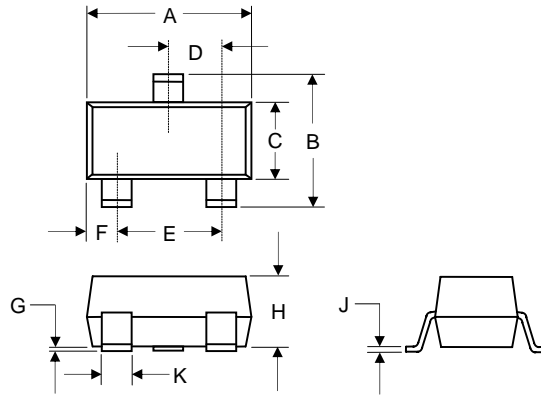
SOD723

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.051	.059	1.30	1.50	
B	.035	.043	0.90	1.10	
C	.022	.026	0.55	0.65	
D	.001	.003	0.01	0.07	
E	.010	.014	0.25	0.35	
F	.003	.006	0.08	0.15	
G	.020	.023	0.52	0.58	
H	.021	.026	0.53	0.65	



Note: Drawings Are Not To Scale

PACKAGE OUTLINES



SOT-23

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.110	.120	2.80	3.04	
B	.083	.098	2.10	2.64	
C	.047	.055	1.20	1.40	
D	.035	.041	0.89	1.03	
E	.070	.081	1.78	2.05	
F	.018	.024	0.45	0.60	
G	.0005	.0039	0.013	0.100	
H	.035	.044	0.89	1.12	
J	.003	.007	0.085	0.18	
K	.015	.020	0.37	0.51	

SOT-23-3L

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.110	.120	2.80	3.04	
B	.104	.116	2.65	2.95	
C	.059	.067	1.50	1.70	
D	.037		0.95		TYP
E	.070	.081	1.78	2.05	
G	---	.004	---	0.10	
H	.041	.045	1.05	1.15	
J	.004	.008	0.10	0.20	
K	.012	.016	0.30	0.40	

SOT-323

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.079	.087	2.00	2.20	
B	.085	.096	2.15	2.45	
C	.045	.053	1.15	1.35	
D	.026		0.65		TYP
E	.047	.055	1.20	1.40	
G	---	.004	---	0.10	
H	.035	.039	0.90	1.00	
J	.003	.006	0.08	0.15	
K	.008	.016	0.20	0.40	

SOT-523

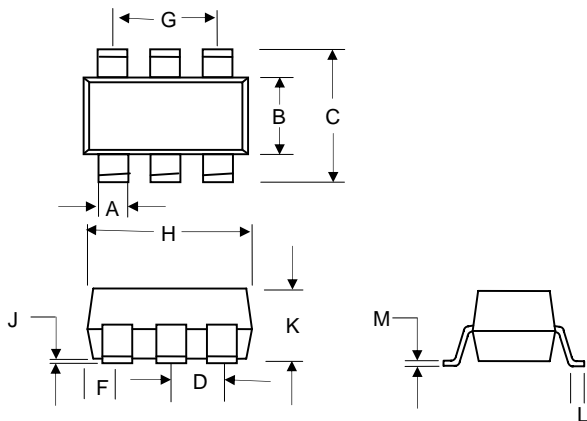
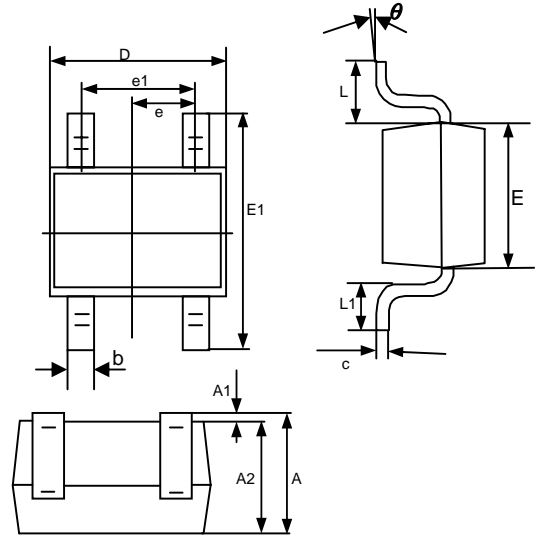
DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.059	.067	1.50	1.70	
B	.030	.033	0.75	0.85	
C	.057	.069	1.45	1.75	
D	.020 Nominal		0.50 Nominal		
E	.035	.043	0.90	1.10	
G	.000	.004	.000	.100	
H	.028	.031	.70	0.80	
J	.004	.008	.100	.200	
K	.010	.014	.25	.35	

Note: Drawings Are Not To Scale

PACKAGE OUTLINES

SOT-343

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.035	.043	0.90	1.10	
A1	---	.004	---	0.10	
A2	.035	.039	0.9	1.00	
b	.006	.014	0.15	0.35	
c	.003	.006	0.08	0.15	
D	.079	.087	2.00	2.20	
E	.045	.053	1.15	1.35	
E1	.085	.096	2.15	2.45	
e	.026TYP		0.65TYP		
e1	.047	.055	1.20	1.40	
L	.021REF		0.525REF		
L1	0.10	0.18	0.26	0.46	
θ	0°	8°	0°	8°	

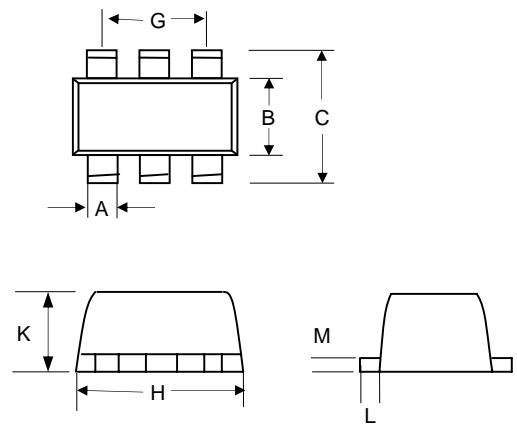


SOT-363

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.004	.012	0.10	0.30	
B	.045	.053	1.15	1.35	
C	.079	.087	2.00	2.20	
D	.026		0.65Nominal		
F	.012	.016	0.30	0.40	
H	.071	.087	1.80	2.20	
J	---	.004	---	0.10	
K	.035	.039	0.90	1.00	
L	.010	.016	0.25	0.40	
M	.004	.016	0.10	0.25	

SOT-563

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.006	.011	0.15	0.30	
B	.043	.049	1.10	1.25	
C	.061	.067	1.55	1.70	
D	.020		0.50		
G	.035	.043	0.90	1.10	
H	.059	.067	1.50	1.70	
K	.022	.023	0.56	0.60	
L	.004	.011	0.10	0.30	
M	.004	.007	0.10	0.18	

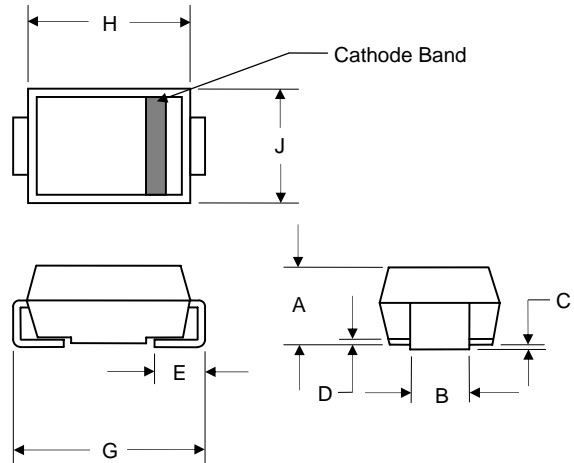


Note: Drawings Are Not To Scale

PACKAGE OUTLINES

SMA (DO-214AC)

DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.078	.096	2.00	2.44	
B	.055	.062	1.40	1.60	
C	.002	.008	0.051	0.203	
E	.030	.060	0.76	1.52	
G	.188	.208	4.80	5.28	
H	.157	.181	4.00	4.60	
J	.098	.114	2.50	2.90	

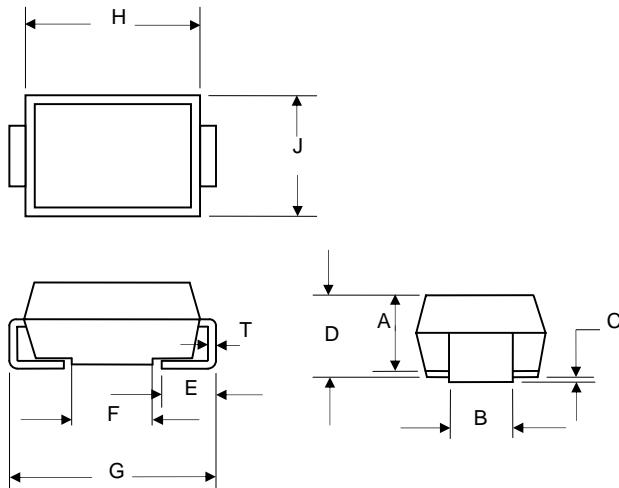


SMB (DO-214AA)

DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.083	.096	2.13	2.44	
B	.075	.083	1.91	2.11	
C	.002	.008	.051	.203	
D	-----	.02	-----	.51	
E	.030	.050	0.76	1.27	
G	.200	.220	5.08	5.59	
H	.160	.185	4.06	4.70	
J	.130	.155	3.30	3.94	

SMC (DO-214AB)

DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.079	.103	2.00	2.62	
B	.108	.128	2.75	3.25	
C	.002	.008	0.051	0.203	
D	-----	.020	-----	0.51	
E	.030	.050	0.76	1.27	
G	.305	.320	7.75	8.13	
H	.260	.280	6.60	7.11	
J	.220	.245	5.59	6.22	



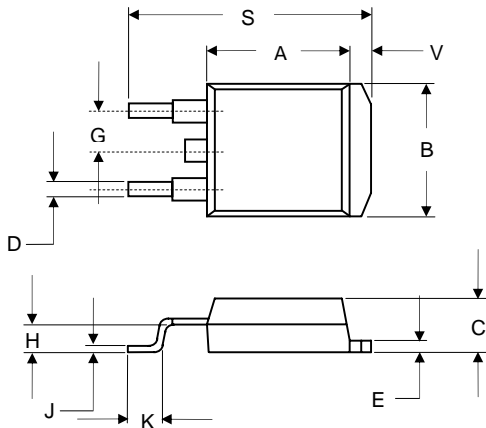
SMAG

DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.079	.091	2.00	2.32	
B	.055	.063	1.40	1.60	
C	.002	.008	0.05	0.20	
D	-----	.096	-----	2.44	
E	.041	.045	1.05	1.15	
F	.075	.083	1.90	2.10	
G	.189	.201	4.80	5.10	
H	.161	.177	4.10	4.50	
J	.094	.110	2.40	2.80	
T	.008	.012	0.20	0.30	

Note: Drawings Are Not To Scale

PACKAGE OUTLINES

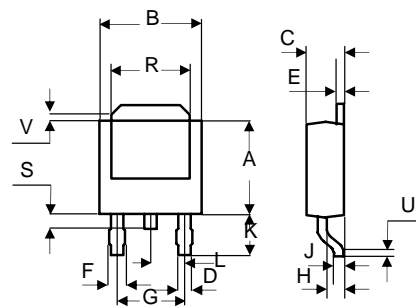
D²-PACK



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.320	.359	8.13	9.14	
B	.380	.411	9.65	10.45	
C	.160	.190	4.06	4.83	
D	.020	.035	0.51	0.89	
E	.045	.055	1.14	1.40	
G	.095	.105	2.41	2.67	
H	.096	.120	2.43	3.03	
J	.014	.021	0.35	0.53	
K	.090	.110	2.29	2.79	
S	.575	.622	14.60	15.80	
V	.045	.055	1.14	1.40	

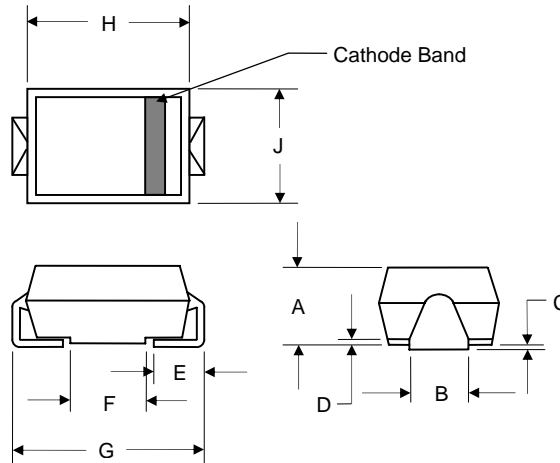
D-PACK

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.235	0.250	5.97	6.35	
B	0.250	0.265	6.35	6.73	
C	0.086	0.094	2.19	2.38	
D	0.027	0.035	0.69	0.88	
E	0.033	0.040	0.84	1.01	
F	0.037	0.047	0.94	1.19	
G	0.180	BCS	4.85	BCS	
H	0.034	0.040	0.87	1.01	
J	0.018	0.023	0.46	0.58	
K	0.102	0.114	2.60	2.89	
L	0.090	BCS	2.29	BCS	
R	0.175	0.215	4.45	5.46	
S	0.020	0.050	0.51	1.27	
U	0.020	-----	0.51	-----	
V	0.030	0.050	0.77	1.27	



Note: Drawings Are Not To Scale

PACKAGE OUTLINES



HSMA

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.078	.116	1.98	2.95	
B	.067	.089	1.70	2.25	
C	.002	.008	0.05	0.20	
D	-----	.020	-----	0.51	
E	.035	.055	0.89	1.40	
F	.065	.091	1.65	2.32	
G	.205	.224	5.21	5.69	
H	.160	.180	4.06	4.57	
J	.100	.112	2.57	2.84	

HSMB

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.078	.116	1.98	2.95	
B	.075	.089	1.90	2.25	
C	.002	.008	0.05	0.20	
D	-----	.020	-----	0.51	
E	.035	.055	0.89	1.40	
F	.065	.091	1.65	2.32	
G	.205	.224	5.21	5.69	
H	.160	.180	4.06	4.57	
J	.130	.155	3.30	3.94	

HSMC

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.200	.214	5.08	5.43	
B	.177	.203	4.50	5.15	
C	.002	.005	0.05	0.13	
D	-----	.020	-----	0.51	
E	.053	.067	1.35	1.70	
F	.168	.179	4.27	4.55	
G	.320	.330	8.13	8.38	
H	.239	.243	6.08	6.18	
J	.234	.240	5.95	6.10	

SMAE

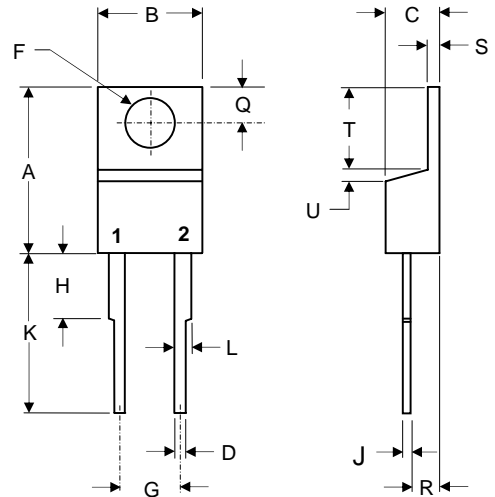
DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.079	.096	2.01	2.44	
B	.050	.075	1.27	1.90	
C	.002	.008	.05	.20	
D	-----	.02	-----	.51	
E	.030	.060	0.76	1.52	
G	.189	.208	4.80	5.30	
H	.157	.185	4.00	4.57	
J	.090	.115	2.29	2.92	

Note: Drawings Are Not To Scale

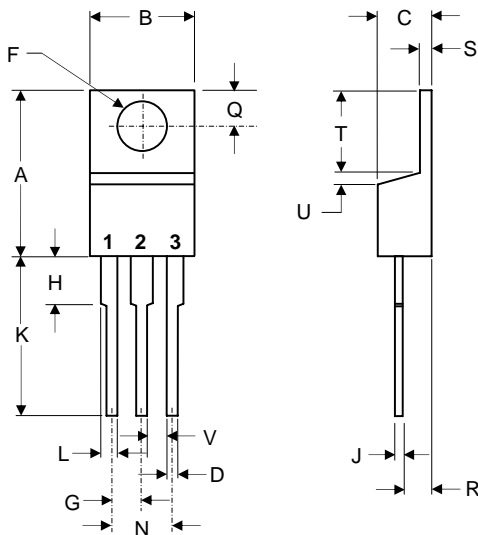
PACKAGE OUTLINES

TO-220AC

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.560	.625	14.22	15.88	
B	.380	.420	9.65	10.67	
C	.140	.190	3.56	4.82	
D	.020	.045	0.51	1.14	
F	.139	.161	3.53	4.09	∅
G	.190	.210	4.83	5.33	
H	---	.250	---	6.35	
J	.012	.025	0.30	0.64	
K	.500	.580	12.70	14.73	
L	.045	.060	1.14	1.52	
Q	.100	.135	2.54	3.43	
R	.080	.115	2.04	2.92	
S	.045	.055	1.14	1.39	
T	.230	.270	5.84	6.86	
U	-----	.050	-----	1.27	



TO-220AB



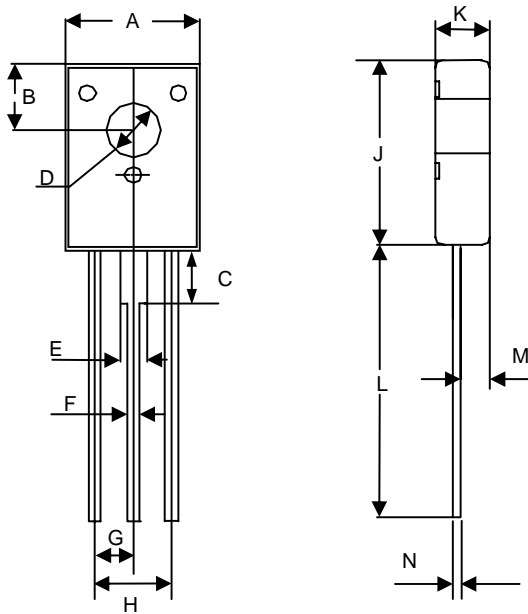
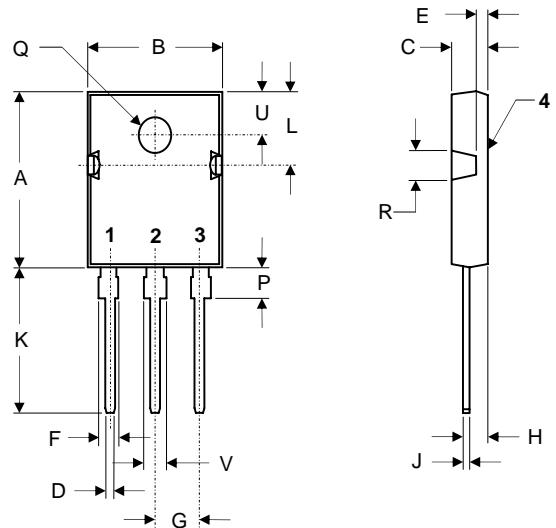
DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.560	.625	14.22	15.88	
B	.380	.420	9.65	10.67	
C	.140	.190	3.56	4.82	
D	.020	.045	0.51	1.14	
F	.139	.161	3.53	4.09	∅
G	.190	.110	2.29	2.79	
H	---	.250	---	6.35	
J	.012	.025	0.30	0.64	
K	.500	.580	12.70	14.73	
L	.045	.060	1.14	1.52	
N	.190	.210	4.83	5.33	
Q	.100	.135	2.54	3.43	
R	.080	.115	2.04	2.92	
S	.045	.055	1.14	1.39	
T	.230	.270	5.84	6.86	
U	-----	.050	-----	1.27	
V	.045	-----	1.15	-----	

Note: Drawings Are Not To Scale

PACKAGE OUTLINES

TO-247 (TO-3P)

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.837	.856	21.25	21.75	
B	.620	.640	15.75	16.25	
C	.192	.202	4.87	5.13	
D	.044	.048	1.12	1.22	
E	.074	.082	1.88	2.08	
F	.075	.085	1.90	2.16	
G	.205	.224	5.20	5.70	
H	.083	.095	2.10	2.40	
J	.020	.030	0.51	0.76	
K	.772	.791	19.60	20.10	
L	.286	.295	7.26	7.50	
P	.149	.172	3.78	4.38	
Q	.114	.126	2.90	3.20	∅
R	.173TYP		4.40TYP		
U	.209	BSC	5.30	BSC	
V	.115	.127	2.93	3.22	



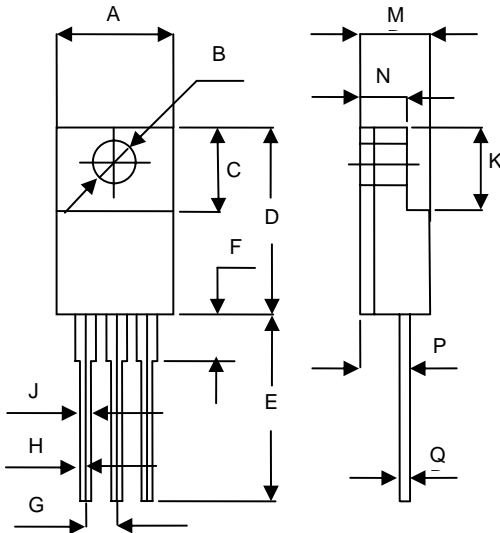
TO-126

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.291	0.307	7.40	7.80	
B	0.154	0.161	3.90	4.10	
C	0.083	0.091	2.10	2.30	
D	0.118	0.126	3.00	3.20	
E	0.046	0.056	1.17	1.37	
F	0.026	0.034	0.66	0.86	
G	0.09(Typ)		2.29(Typ)		
H	0.176	0.184	4.48	4.68	
J	0.417	0.433	10.60	11.00	
K	0.098	0.114	2.50	2.90	
L	0.602	0.618	15.30	15.70	
M	0.043	0.059	1.10	1.50	
N	0.018	0.024	0.45	0.60	

Note: Drawings Are Not To Scale

PACKAGE OUTLINES

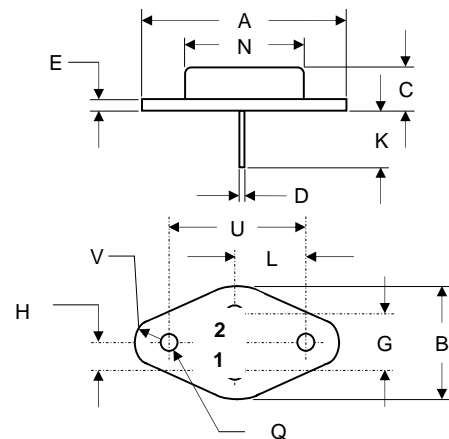
ITO-220AB



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	---	.406	---	10.30	
B	.118	.134	3.00	3.40	
C	.248	.272	6.30	6.90	
D	.583	.606	14.8	15.40	
E	.512	.543	13.00	13.80	
F	---	.161	---	4.10	
G	.100		2.55		
H	---	.035	---	0.90	
J	---	.055	---	1.40	
K	.266	.285	6.75	7.25	
M	---	.189	---	4.80	
N	---	.130	---	3.31	
P	.098	.114	2.50	2.90	
Q	---	.032	---	.80	

TO-3

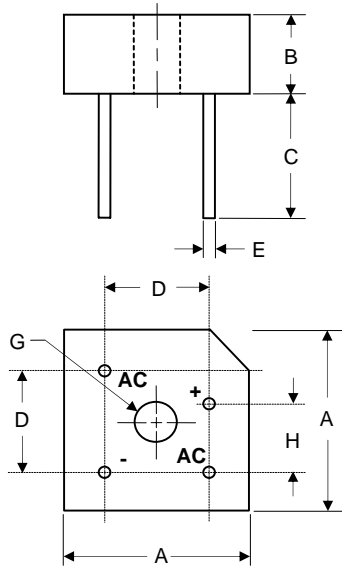
DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	1.550	REF	39.37	REF	
B	-----	1.050	-----	26.67	
C	.250	.335	6.35	8.51	
D	.038	.043	0.97	1.09	
E	.055	.070	1.40	1.77	
G	.430	BSC	10.92	BSC	
H	.215	BSC	5.46	BSC	
K	.440	.480	11.18	12.19	
L	.665	BSC	16.89	BSC	
N	-----	.830	-----	21.08	
Q	.151	.165	3.84	4.19	∅
U	1.187	BSC	30.15	BSC	
V	.131	.188	3.33	4.77	



Note: Drawings Are Not To Scale

PACKAGE OUTLINES

MB-35W



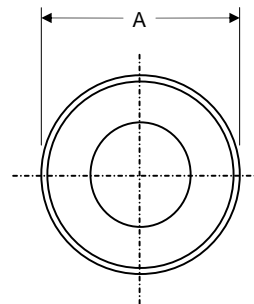
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	1.115	1.135	28.33	28.83	
B	.427	.447	10.85	11.35	
C	.774	-----	19.65	-----	
D	.673	.752	17.10	19.10	
E	.038	.042	.96	1.07	∅ TYP
G	.193	-----	4.90	-----	∅
H	.429	.468	10.90	11.90	

MP-50W

Same as MB-50W but the case is made up of a metal and plastic construction instead of just metal.

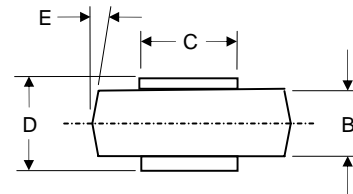
RA

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.380	.410	9.7	10.4	∅
B	.165	.185	4.2	4.7	
C	.215	.225	5.5	5.7	∅
D	.235	.250	6.0	6.4	∅
E	-----	5°	-----	5°	NOM



SRA

DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.327	.347	8.3	8.9	∅
B	.165	.185	4.2	4.7	
C	.215	.225	5.5	5.7	∅
D	.235	.250	6.0	6.4	∅
E	-----	5°	-----	5°	NOM

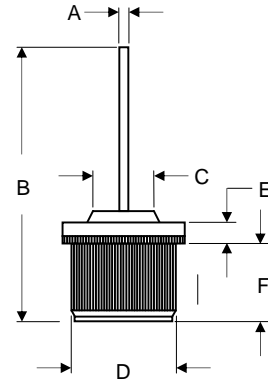
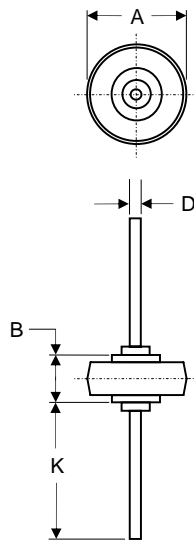


Note: Drawings Are Not To Scale

PACKAGE OUTLINES

PRESSFIT

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.097	.103	2.464	2.616	∅
B	1.063	1.142	27.00	29.00	
C	-----	.395	-----	10.04	∅
D	.501	.505	12.73	12.82	∅
E	.122	.130	3.10	3.30	
F	.258	.278	6.55	7.05	

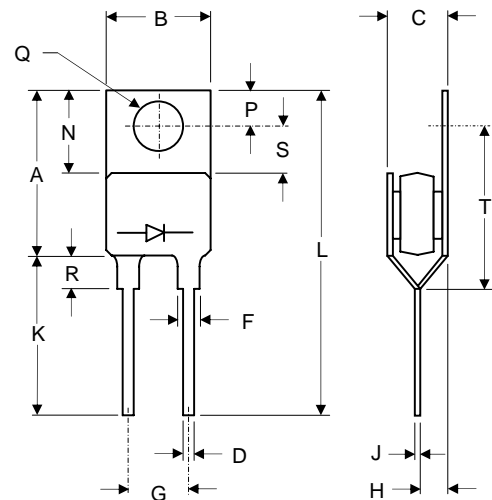


LEADED BUTTON

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.332	.342	8.43	8.69	∅
B	.234	.246	5.94	6.25	
D	.050	.053	1.27	1.35	∅
K	.990	1.010	25.15	25.65	2 PL

TO-220 BUTTON

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.560	.625	14.22	15.88	
B	.380	.420	9.65	10.67	
C	.284	.310	7.21	7.87	
D	.025	.045	0.64	1.14	
F	.060	.090	1.52	2.29	
G	.170	.210	4.32	5.33	
H	.080	.110	2.03	2.92	
J	.023	.029	0.58	0.74	
K	.562	.582	14.27	14.78	
L	-----	1.187	-----	30.15	
N	.230	.270	5.84	6.86	
P	.100	.12	2.54	3.05	
Q	.139	.147	3.53	3.73	∅
R	-----	.200	-----	5.08	
S	.140	.150	3.55	3.80	
T	.670	.690	17.02	17.53	

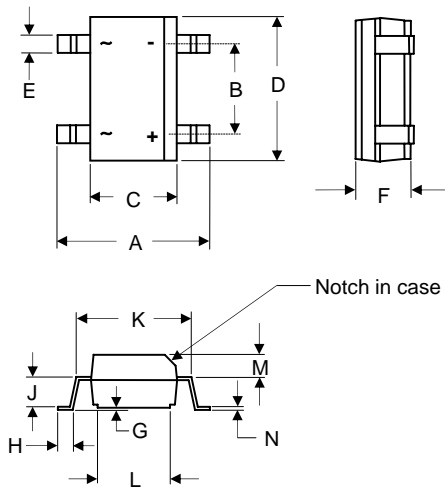
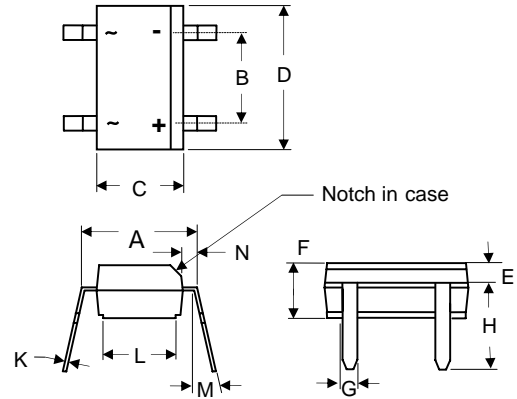


Note: Drawings Are Not To Scale

PACKAGE OUTLINES

MB-1

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.195	.205	4.95	5.21	
B	.095	.105	2.41	2.67	
C	.145	.155	3.68	3.94	
D	.179	.190	4.55	4.83	
E	.039	.049	0.99	1.24	
F	.090	.106	2.30	2.70	
G	.017	.029	0.43	0.74	
H	.132	.148	3.35	3.75	
K	.006	.016	0.15	0.41	
L	.137	.147	3.48	3.73	
M	10°	15°	10°	15°	
N	.020	.028	0.51	0.71	

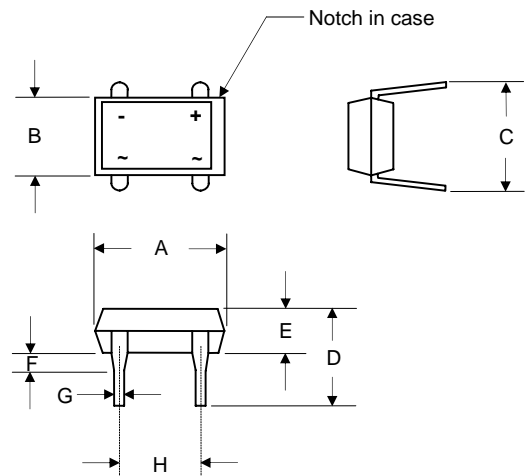


MBS-1

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.252	.272	6.40	6.90	
B	.095	.105	2.41	2.67	
C	.144	.161	3.65	4.10	
D	.179	.195	4.55	4.95	
E	.017	.029	0.45	0.75	
F	.090	.106	2.30	2.70	
G	.004	.008	0.10	0.20	
H	.019	.038	0.48	0.96	
J	.058	.062	1.47	1.57	
K	.195	.205	4.95	5.21	
L	.110	.114	2.80	2.90	
M	.039	.049	0.99	1.24	
N	.006	.016	0.15	0.41	

DB-1

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.316	.335	8.05	8.51	
B	.245	.255	6.20	6.50	
C	.300	.350	7.60	8.90	
D	.236	.299	6.01	7.60	
E	.102	.130	2.60	3.30	
F	.060		1.50		Typ
G	.016	.022	0.41	0.56	Typ
H	.195	.205	5.00	5.20	

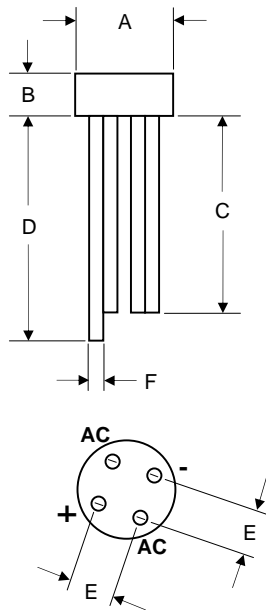
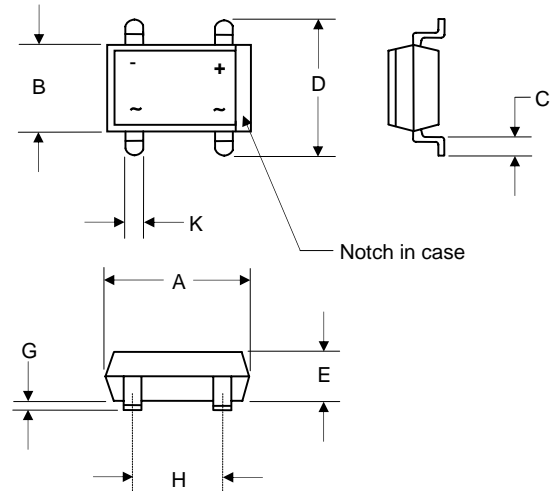


Note: Drawings Are Not To Scale

PACKAGE OUTLINES

SDB-1

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.316	.335	8.05	8.51	
B	.245	.255	6.20	6.50	
C	.040	.060	1.02	1.50	
D	.360	.410	9.40	10.40	
E	.102	.130	2.60	3.30	
G	.003	.013	.076	.33	
H	.195	.205	5.00	5.20	
K	.040	.047	1.02	1.20	



RB15

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	----	.358	----	9.10	∅
B	.197	.169	5.00	4.30	
C	1.000	----	25.40	----	
D	1.098	----	27.90	----	
E	.180	.220	4.60	5.60	
F	.028	.032	0.71	0.81	∅

WOL

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	----	.378	----	9.60	∅
B	----	.291	----	7.40	
C	1.000	----	25.40	----	
D	1.098	----	27.90	----	
E	.180	.220	4.60	5.60	
F	.028	.032	0.71	0.81	∅

WOM

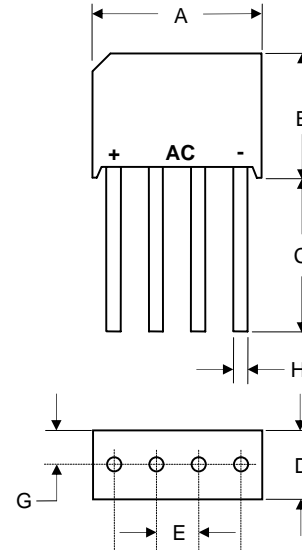
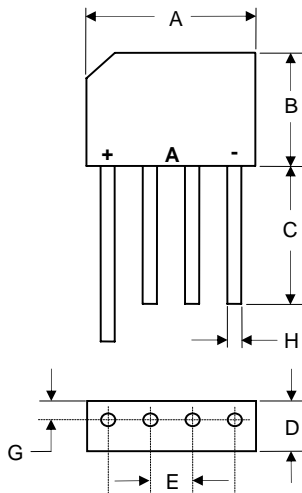
DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	----	.358	----	9.10	∅
B	----	.225	----	5.70	
C	1.000	----	25.40	----	
D	1.098	----	27.90	----	
E	.180	.220	4.60	5.60	
F	.028	.032	0.71	0.81	∅

Note: Drawings Are Not To Scale

PACKAGE OUTLINES

BR-8D

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	----	.693	----	17.60	
B	----	.504	----	12.80	
C	0.750	---	19.00	---	
D	---	.250	---	6.40	
E	.150	----	3.80	----	3PL/TYP
G	.125	----	3.20	----	
H	.030	.032	0.76	0.81	∅

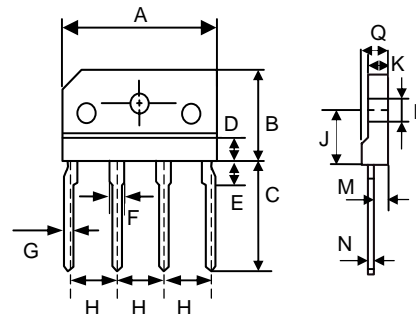


RS-4L

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.728	.768	18.50	19.50	
B	.600	.640	15.20	16.30	
C	.750	----	19.00	----	
D	.236	.256	6.00	6.50	
E	.180	.220	4.60	5.60	3 PL
G	----	.083	----	2.10	
H	.048	.052	1.20	1.30	∅

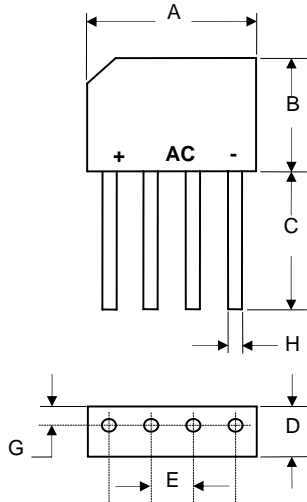
RS-4M

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.917	.992	23.30	25.20	
B	.578	.600	14.70	15.30	
C	.677	.700	17.20	17.80	
D	.157		4.00		
E	.130	.145	3.30	3.70	
F	.060	.075	1.50	1.90	
G	.035	.043	0.90	1.10	
H	.287	.303	7.30	7.70	
Q	.173	.189	4.40	4.80	
J	.366	.382	9.30	9.70	
K	.134	.150	3.40	3.80	
L	.122	.134	3.10	3.40	
M	.098	.114	2.50	2.90	
N	.031	.043	0.80	1.10	



Note: Drawings Are Not To Scale

PACKAGE OUTLINES

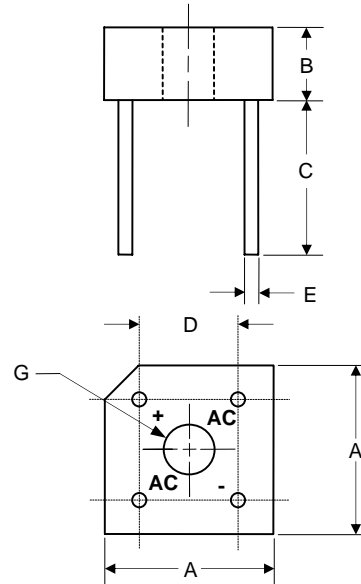


KBP

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	---	.693	---	17.60	
B	---	.504	---	12.80	
C	.750	---	19.00	---	
D	---	.250	---	6.40	
E	.150	---	3.80	---	3PL/TYP
G	.125	---	3.20	---	
H	.320		0.8		

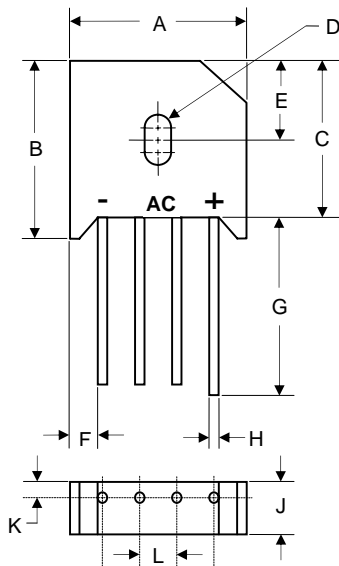
PB-3

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.580	.620	14.69	15.71	2 PL
B	.230	.270	5.84	6.86	
C	.750	----	19.00	----	
D	.405	.445	10.29	11.31	2 PL
E	.028	.032	0.71	0.81	∅ TYP
G	.140	.150	3.56	3.81	∅



RS-6

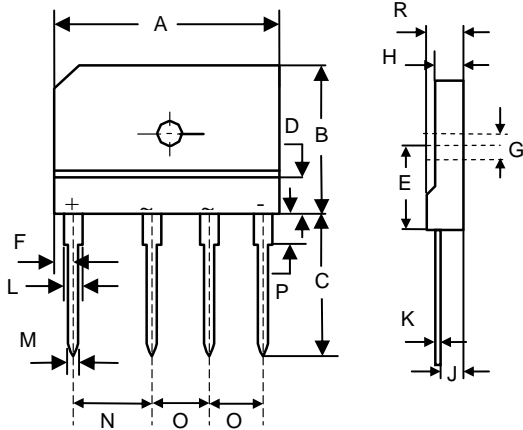
DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.895	.935	22.70	23.70	
B	----	.760	----	19.30	
C	.660	.700	16.80	17.80	
D	.150∅ x .230L		3.80∅ x 5.57L		HOLE
E	----	.300	----	7.50	NOM
F	----	.157	----	4.00	NOM
G	1.000	----	25.40	----	
H	.048	.052	1.20	1.30	∅ TYP
J	.260	.280	6.60	7.10	
K	----	.075	----	1.90	NOM
L	.180	.220	4.60	5.60	



Note: Drawings Are Not To Scale

PACKAGE OUTLINES

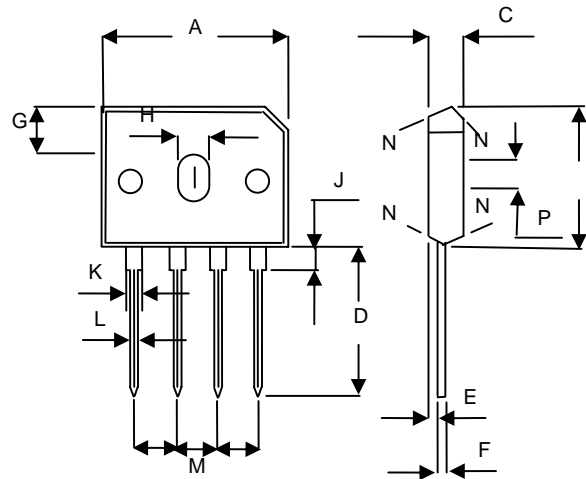
GBJ



DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	1.170	1.190	29.70	30.30	
B	.780	.800	19.70	20.30	
C	.670	.710	17.00	18.00	
D	.019	.019	4.70	4.90	
E	.430	.440	10.80	11.20	
F	.090	.110	2.30	2.70	
G	.120	.130	3.10	3.40	
H	.130	.150	3.40	3.80	
R	.170	.190	4.40	4.80	
J	.100	.110	2.50	2.90	
K	.020	.030	0.60	0.80	
L	.080	.090	2.00	2.40	
M	.040	.040	0.90	1.10	
N	.390	.400	9.80	10.20	
O	.290	.300	7.30	7.70	
P	.150	.170	3.80	4.20	

GBU

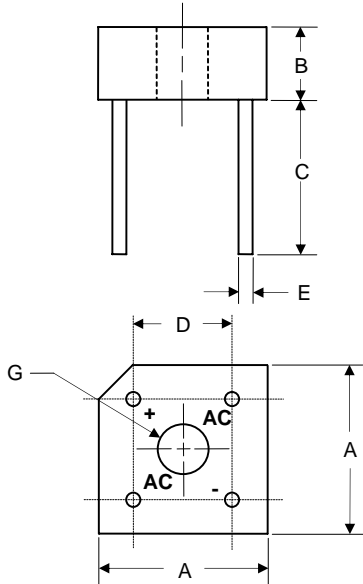
DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.860	.880	21.80	22.30	
B	.720	.740	18.30	18.80	
C	.130	.140	3.30	3.56	
D	.690	.710	17.50	18.00	
E	.030	.039	0.76	1.00	
F	.018	.022	0.46	0.56	
G	.290	.310	7.40	7.90	
H	.140	.160	3.50	4.10	
R	.065	.085	1.65	2.16	
J	.089	.108	2.25	2.75	
K	.077	.093	1.95	2.35	
L	.040	.050	1.02	1.27	
M	.190	.210	4.83	5.33	
N	7.0° TYPICAL				



Note: Drawings Are Not To Scale

PACKAGE OUTLINES

PB-6



DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.578	.618	14.69	15.71	2 PL
B	.230	.270	5.84	6.86	
C	.750	----	19.10	----	
D	.405	.444	10.30	11.30	2 PL
E	.038	.042	0.97	1.07	4 PL/TYP ∅
G	.145	----	3.70	----	∅

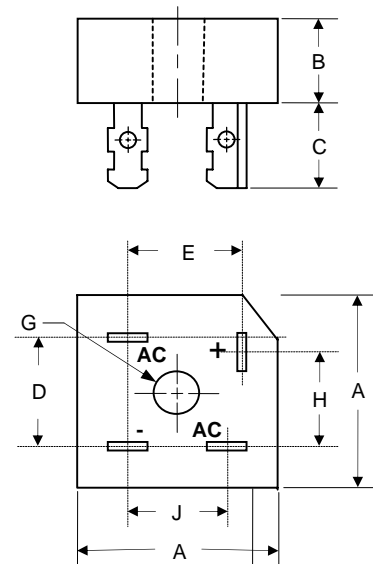
BR-6

DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.578	.618	14.69	15.71	2 PL
B	.230	.270	5.84	6.86	
C	.750	----	19.10	----	
D	.405	.444	10.30	11.30	2 PL
E	.038	.042	0.97	1.07	∅
G	.145	----	3.70	----	∅

Note: The BR-6 Case is made of ceramic material

MB-35

DIM	DIMENSIONS				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	1.115	1.135	28.33	28.83	
B	.427	.447	10.85	11.35	
C	.428	.468	10.87	11.89	
D	.688	.730	17.48	18.50	
E	.618	.658	15.70	16.71	
G	.193	----	4.90	----	∅
H	.618	.658	15.70	16.71	
J	.530	.570	13.46	14.48	

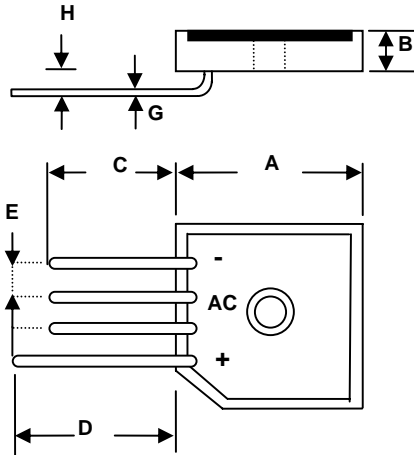


MP-50

Same as MB-35 but the case is made up of a metal and plastic construction instead of just metal.

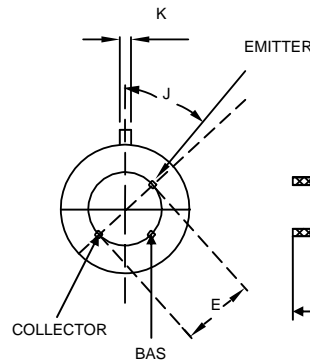
Note: Drawings Are Not To Scale

PACKAGE OUTLINES

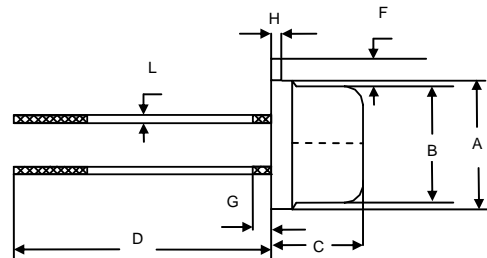


KBPC

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	1.12	1.13	28.40	28.70	
B	.432	.442	10.97	11.23	
C	.547	---	13.90	---	
D	.752	---	19.10	---	
E	.201	---	5.10	---	
G	.047	---	1.20	---	Φ
H	.120	.142	3.05	3.60	



TO-18



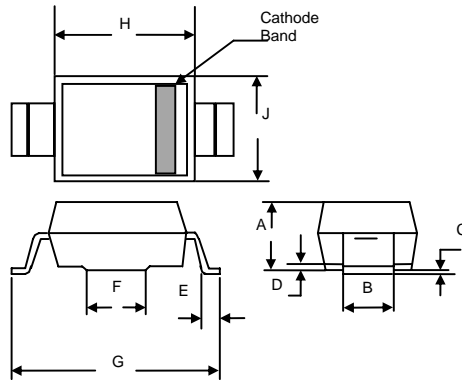
TO-39

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.209	.230	5.309	5.842	Φ
B	.178	.195	4.521	4.953	Φ
C	.170	.210	4.318	5.334	
D	.50	----	12.7	----	
E	.100		2.54		ΦTYP
F	.028	.048	.7112	1.219	
G	----	.050	----	1.27	
H	.009	.031	0.229	0.787	
J	44°	46°	44°	46°	
K	.036	.046	0.914	1.168	
L	.016	.021	0.406	0.533	

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.335	.370	8.509	9.40	Φ
B	.305	.335	7.747	8.509	Φ
C	.240	.260	6.096	6.604	
D	.50	----	12.7	----	
E	.200		5.08		ΦTYP
F	.029	.045	.7366	11.43	
G	----	.050	----	1.27	
H	.009	.031	0.229	7.874	
J	44°	46°	44°	46°	
K	.028	.034	0.711	0.864	
L	.016	.021	0.406	0.533	

Note: Drawings Are Not To Scale

PACKAGE OUTLINES

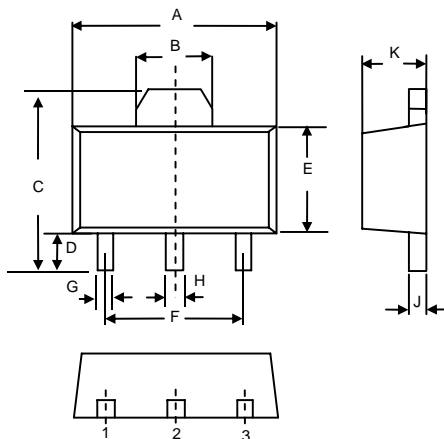


SMBG

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.075	.095	1.91	2.41	
B	.077	.083	1.96	2.10	
C	.004	.008	.10	.20	
D	-----	.02	-----	.51	
E	.015	.03	.38	.76	
G	.235	.255	5.97	6.48	
H	.160	.180	4.06	4.57	
J	.130	.155	3.30	3.94	

SMCG

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.075	.095	1.91	2.41	
B	.115	.121	2.92	3.07	
C	.004	.008	.10	.20	
D	-----	.02	-----	.51	
E	.025	.04	.64	1.01	
G	.380	.400	9.65	10.1	
H	.260	.280	6.60	7.11	
J	.220	.245	5.59	6.22	

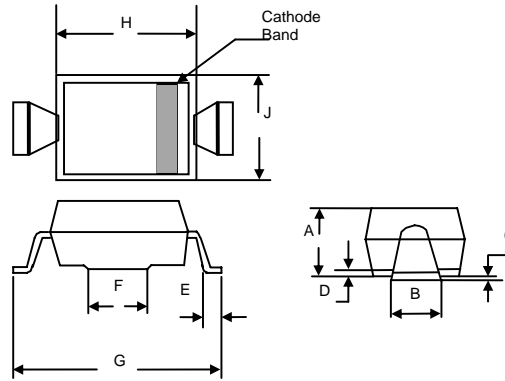


SOT-89

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.173	.181	4.40	4.60	
B	.055	.071	1.40	1.80	
C	.154	.165	3.91	4.19	
D	.035	.043	0.90	1.10	
E	.091	.102	2.3	2.6	
F	.114	.122	2.90	3.10	
G	.013	.020	0.32	0.52	
H	.014	.022	0.36	0.56	
J	.014	.017	0.35	0.44	
K	.055	.063	1.40	1.60	

Note: Drawings Are Not To Scale

PACKAGE OUTLINES



HSMBG

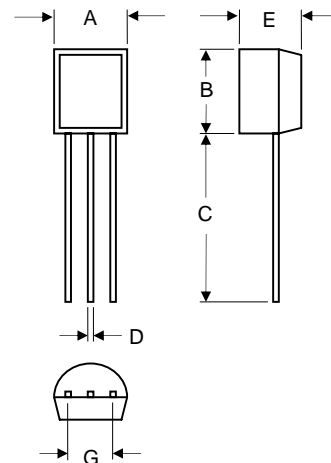
DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.075	.116	1.90	2.95	
B	.078	.087	1.98	2.21	
C	.002	.008	.05	.20	
D	----	.02	----	.51	
E	.015	.03	.38	.76	
F	.065	.084	1.65	2.13	
G	.245	.276	6.22	7.00	
H	.160	.180	4.06	4.57	
J	.130	.151	3.30	3.83	

HSMCG

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.2	.214	5.08	5.43	
B	.148	.177	3.60	4.50	
C	---	.012	---	0.30	
D	---	.02	---	.51	
E	.031	.059	0.80	1.50	
F	.157	.179	4.00	4.55	
G	.362	.413	9.20	10.50	
H	.239	.241	6.08	6.13	
J	.234	.240	5.95	6.10	

TO-92

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.175	.185	4.45	4.70	
B	.175	.185	4.45	4.70	
C	.500	----	12.70	----	
D	.016	.020	0.41	0.63	
E	.135	.145	3.43	3.68	
G	.095	.105	2.42	2.67	

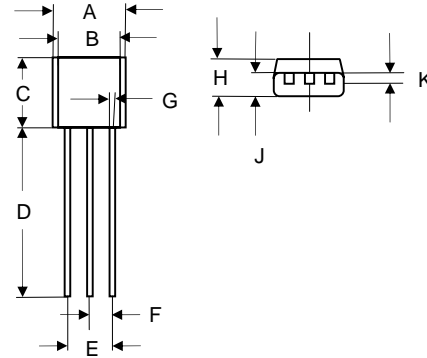


Note: Drawings Are Not To Scale

PACKAGE OUTLINES

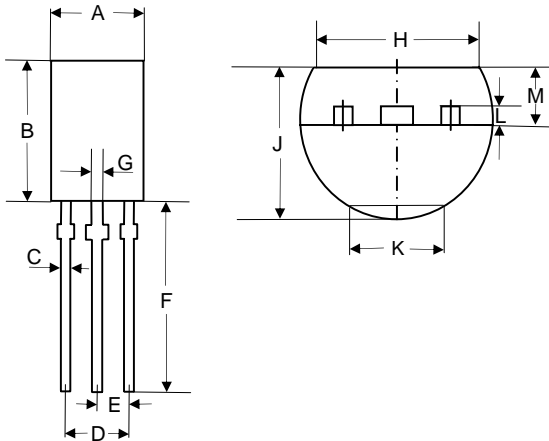
TO-92S

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.152	.163	3.85	4.15	
B	.117	.129	2.97	3.27	
C	.119	.130	3.01	3.31	
D	.594	.610	15.10	15.50	
E	.096	.104	2.44	2.64	
F	.050TYP		1.27TYP		
G	.015	.022	0.38	0.55	
H	.056	.064	1.24	1.62	
J	.026	.034	0.66	0.86	
K	.014	.020	0.36	0.51	



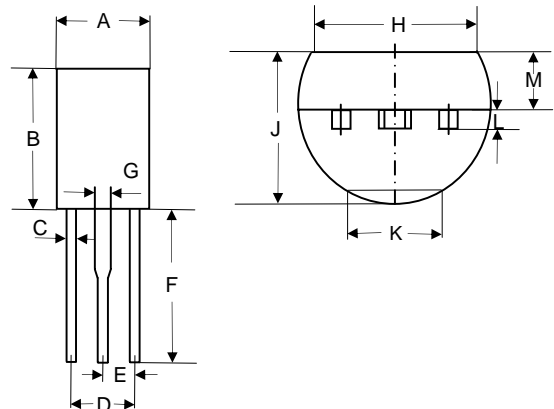
TO-92L

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.185	.201	4.70	5.10	
B	.307	.323	7.80	8.20	
C	.014	.022	0.35	0.55	
D	.096	.104	2.44	2.64	
E	.050TYP		1.27TYP		
F	.534	.559	13.80	14.20	
G	.024	.031	0.60	0.80	
H	.157		4.00		
J	.146	.161	3.70	4.10	
K		.063		1.60	
L	.014	.018	0.35	0.45	
M	.050	.062	1.28	1.58	



TO-92MOD

DIMENSIONS					
DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	.228	.244	5.80	6.20	
B	.331	.346	8.40	8.80	
C	.016	.024	0.40	0.60	
D	.114	.122	2.90	3.10	
E	.059TYP		1.50TYP		
F	.514	.530	13.05	13.45	
G	.035	.043	0.90	1.10	
H	.157		4.00		
J	.185	.201	4.70	5.10	
K		.063		1.60	
L	.016	.020	0.40	0.50	
M	.068	.080	1.73	2.03	



Note: Drawings Are Not To Scale