

Packaging Options

BULK PACKAGING

Inner cardboard boxes will be either 6 x 6 x 2 inches (15 x 15 x 5cm); or 6 x 6 x 3.5 inches (15 x 15 x 9cm) and are labeled as shown. In certain circumstances, sealed plastic bags may be used as an alternate.

Outer corrugated cardboard shipping cartons range in size from 6.5 x 7 x 8 inches (17 x 18 x 20cm) to 12.5 x 15 x 7 inches (32 x 38 x 18cm) and are labeled as follows:

CUSTOMER	VISHAY CERA-MITE
<ul style="list-style-type: none"> Name Purchaser Order Number Part Number & Rev. Item Number 	<ul style="list-style-type: none"> Part No. & Descriptor Code Order Number Lot Number Quantity & Date Code
Vishay Cera-Mite Corporation • Grafton, WI 53024 • USA	

Vishay Cera-Mite Corporation 1327 6th Avenue Grafton, WI 53024		Vishay Cera-Mite Corporation 6150 Van Hecke Avenue Oconto, WI 54153	
Customer PO#	Customer Part #	Quantity	Box _ of _
Customer Name		Customer Address	

WIRE LEAD OPTIONS

- Radial leaded capacitors may be ordered with various wire lead options by adding appropriate suffix code to the catalog part number.

Example: 30GAD22 GJ (Suffix Code) specifies:

#20 AWG wire; LS = .375"; Inside Crimp; Short Cut Lead Length.

12 VOLT - 1000 VOLT CAPACITORS			SUFFIX CODES FOR VARIOUS LEAD SPACING (LS) AND WIRE SIZE (AWG)									
WIRE FORM DESCRIPTION	WIRE	LEAD LENGTH	.200" (5)		.250" (6.3)		.300" (7.5)		.375" (9.5)		.400" (10)	
			#22 AWG	#24 AWG	#22 AWG	#24 AWG	#22 AWG	#22 AWG	#22 AWG	#22 AWG	#22 AWG	#22 AWG
Straight Wire	Fig 11	Long "LL"	MA	PA	UB	UA	BK	BJ	BL			
Steeple Wire	Fig 12	Long "LL" Cut "CL"	CL	PT	CJ	CH	CA	CK	CB			
			NB	PK	NK	NG	NC	ND	NE			
Step Wire	Fig 14	Long "LL" Cut "CL"	VD	VK	VB	PQ	VF	VG	VH			
			PG	PU	PR	PL	PH	PS	PJ			
Inside Crimp	Fig 15	Long "LL" Cut "CL"	JQ	JT	JC	JF	JL	JS	JP			
			JA	JD	JK	JY	JR	JJ	JB			

2000 AND 3000 VOLT CAPACITORS			SUFFIX CODES FOR VARIOUS LEAD SPACING (LS) AND WIRE SIZE (AWG)											
WIRE FORM DESCRIPTION	WIRE	LEAD LENGTH	.250" (6.3)		.300" (7.5)		.375" (9.5)		.400" (10)		.500" (12.7)		.750" (19)	
			#20 AWG	#22 AWG	#20 AWG	#22 AWG	#20 AWG	#22 AWG	#20 AWG	#22 AWG	#20 AWG	#22 AWG	#20 AWG	#20 AWG
Straight Wire	Fig 11	Long "LL"	AA	UB	AE	BK	AJ	BJ	AD	BL	AM	BM	AB	
Inline Wire	Fig 13	Long "LL" Cut "CL"	XW	XY	UC	UE	UG	UJ	UL	UM	UQ	US	—	
			XX	XZ	UD	UF	UH	UK	UN	UP	UR	UT	—	
Inside Crimp	Fig 15	Long "LL" Cut "CL"	GB	JC	GC	JL	GN	JS	GD	JP	GF	JN	—	
			GE	JK	JH	JR	GJ	JJ	JG	JB	GM	JM	—	

NOTE: Popular wire lead form options are described above; consult factory for other available forms.
NOTE: Practical consideration may limit wire options depending on capacitor size - verify special requirements with factory.

Wire Information : #20 AWG .032" (.81) Copper Wire
 #22 AWG .025" (.64) Copper Wire
 #24 AWG .020" (.51) Copper Clad Steel Wire

PACKAGING OPTIONS:

- Parts will be BULK packaged in cartons or plastic bags unless optional packing is specified.
- Can be optionally TAPE & REELED per EIA-468B or Reverse Reeled. (Fig 16)
- Consult factory for other packaging options, such as Ammo Pack cartons.
- Bar coding is available.

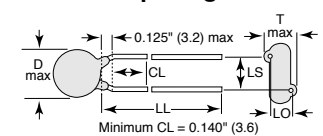
LEAD LENGTH INFORMATION:

- Standard Long Lead "LL" Length = 1.250" (32mm) minimum.
- Cut Lead "CL" Length may be user specified; if unspecified Vishay Cera-Mite supplies 0.187" (4.8mm) EIA standard.
- Cut Lead Lengths are measured from bottom of wire seating plane (wire support point on circuit board).
- Minimum Cut Lead Lengths "CL min" are contained in wire figures 12 thru 15.
- Cut Lead Length Tolerance: +.031"/-.015" (0.8/-0.4mm).

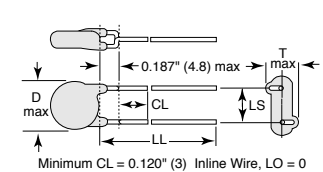
Straight Fig 11



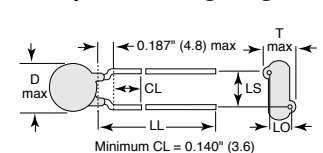
Steeple Fig 12



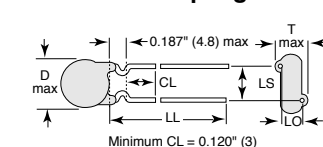
Inline High Voltage Fig 13



Step Low Voltage Fig 14



Inside Crimp Fig 15



TAPE & REEL OPTIONS

- Radial leaded parts may be ordered with Tape & Reel packaging by adding appropriate suffix code to part number.
Example: TGS10 QR (Suffix Code) defines: #22 AWG wire; Straight Lead Form; LS = 5mm; Tape & Reel per EIA 468B.

TAPE & REEL PACKAGING- PART NUMBER SUFFIX CODES				TAPE & REEL SUFFIX CODES FOR VARIOUS WIRE FORMS & SIZES												
TAPE & REEL FIGURE	LEAD SPACING "LS"	MAX. CAP DIAMETER		TAPE & REEL (NOTE 1)	FIG. 11 STRAIGHT WIRE			FIG. 12 STEEPLE WIRE		FIG. 13 INLINE WIRE		FIG. 14 STEP WIRE		FIG. 15 INSIDE CRIMP WIRE		
		in.	mm		#20 AWG	#22 AWG	#24 AWG	#22 AWG	#24 AWG	#20 AWG	#22 AWG	#22 AWG	#24 AWG	#20 AWG	#22 AWG	#24 AWG
A	5mm	.490	12.4	C-M EIA	QG	QA	QB	TK	WK	XA	ZA	VC	VQ	RA	RE	RB
					QH	QR	QD	TR	TX	XB	XN	VZ	VE	RC	RR	LA
B	7.5mm	.530	13.5	C-M EIA	QP	QK	—	—	—	XG	ZC	—	—	RP	RK	—
					QS	QF	—	—	—	XH	XR	—	—	RX	RL	—
C	10mm	.708	18.0	C-M EIA	QQ	QM	—	—	—	XJ	XS	—	—	RQ	RM	—
					AP	QX	—	—	—	XK	XT	—	—	RJ	RU	—
D	7.5mm	.708	18.0	C-M EIA	QW	QN	—	—	—	XL	XU	—	—	RW	RN	—
					AQ	QE	—	—	—	XM	XV	—	—	RV	RD	—

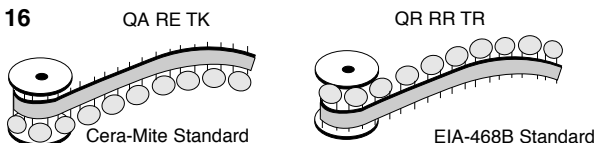
Wire Information : #20 AWG .032" (.81) Tinned Copper Wire
 #22 AWG .025" (.64) Tinned Copper Wire
 #24 AWG .020" (.51) Tinned Copper Clad Steel Wire

TAPE & REEL (EIA - 468-B)

ITEM (DIMENSIONS IN MM)	CODE	Tape & Reel Packaging			
		FIG A LS=5mm P=12.7mm	FIG B LS=7.5mm P=15mm	FIG C LS=10mm P=25.4mm	FIG D LS=7.5mm P=30mm
Pitch of component	P	12.7	15.0	25.4	30.0
Pitch of sprocket hole	P ₀	12.7 ± 0.3	15.0 ± 0.3	12.7 ± 0.3	15.0 ± 0.3
Lead spacing	F	5.0 +0.8 / -0.2	7.5 ± 1.0	10.0 ± 1.0	7.5 ± 1.0
Length from hole center to component center	P ₂	6.35 ± 1.3	7.5 ± 1.5	—	7.5 ± 1.5
Length from hole center to lead	P ₁	3.85 ± 0.7	3.75 ± 1.0	7.7 ± 1.5	3.75 ± 1.0
Body diameter	D	See individual product specification			
Deviation along tape, left/right	ΔS	0 ± 1.3	0 ± 2.0		
Carrier tape width	W	18.0 ± 0.5			
Position of sprocket hole	W ₁	9.0 ± 0.5			
Height (Fig 11) straight wire	H	20 +1.5 / -1.0	20 +1.5 / -1.0	18 +2.0 / -1.0	20 +1.5 / -1.0
Height (Fig 12-15) seating plane		16 ± 0.5	16 ± 0.5	16 ± 0.5	16 ± 0.5
Protrusion length	P ₃	3.0 Max.			
Dia. of sprocket hole	D ₀	4.0 ± 0.2			
Total tape thickness	t ₁	0.6 ± 0.3			
Total thickness, tape and lead wire	t ₂	1.5 Maximum			
Portion to cut in case of defect	L	11 Maximum			
Hold down tape width	W ₀	11.5 Minimum			
Hold down tape position	W ₂	1.5 ± 1.5			

EIA lead spacings for tape and reel are based on multiples of .100" (2.5mm) to coordinate with automatic insertion machinery and boards using .100" grid convention.

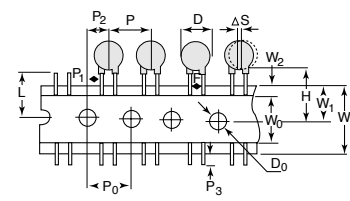
Fig 16



Note 1 Vishay Cera-Mite standard is a reverse reeled version of EIA 468B.

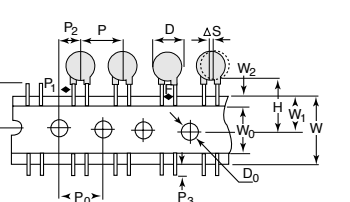
LEAD SPACE	PITCH	CAP DIA.	CAP FAMILY
5mm	12.7mm (0.5")	≤ 12.4mm	≤ 3KVDC

Fig A



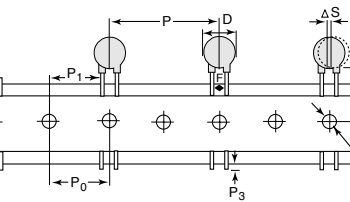
LEAD SPACE	PITCH	CAP DIA.	CAP FAMILY
7.5mm	15mm	≤ 13.5mm	≤ 3KVDC & AC Rated

Fig B



LEAD SPACE	PITCH	CAP DIA.	CAP FAMILY
10mm	25.4mm (1.0")	≤ 18mm	≤ 6KVDC & AC Rated

Fig C



LEAD SPACE	PITCH	CAP DIA.	CAP FAMILY
7.5mm	30mm	≤ 18mm	≤ 6KVDC & AC Rated

Fig D

