



Cera-Trim® Trimmer Capacitors

Cera-Trim® is a high performance surface mount trimmer capacitor designed specifically to withstand harsh environments. These capacitors deliver exceptional performance through microwave frequencies at operating temperatures of -55°C to $+125^{\circ}\text{C}$. The square drive tuning mechanism provides and assures complete compatibility with automated tuning devices for positive non-slip tamper-proof adjustments.

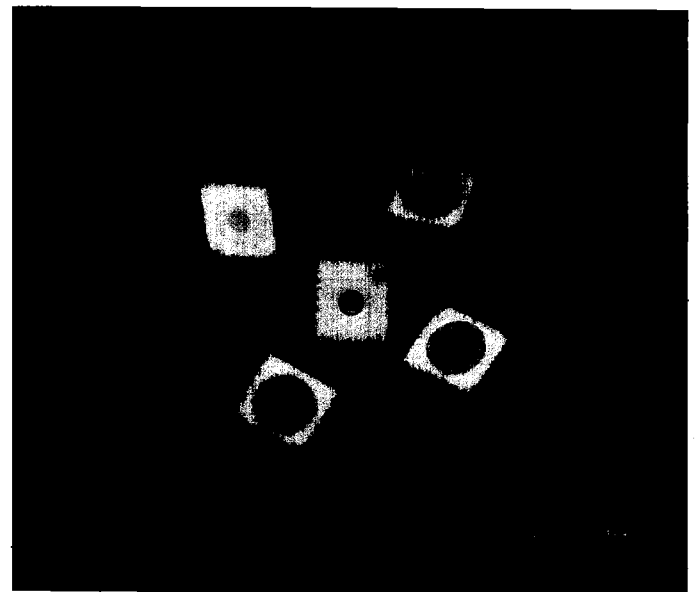
The Cera-Trim® design makes it possible to utilize tape and reel. The alumina housing provides mechanical strength with outstanding electrical and heat resistant properties. The rugged construction renders it resistant to penetration of solder fluxes and cleaning solvents. Recommended handling instructions outlining soldering procedures are available in Johanson specification R-360.

The standard terminal units are available with or without top seal. The SL products are offered as sealed units only.

Characteristics

- Rated voltage: 250 VDC (test voltage 500 VDC)
- Insulation resistance: $>10^4$ meg Ω
- Operating temperature range: -55°C to $+125^{\circ}\text{C}$
- Vibration: 15 g, 10-2000 Hz, MIL-STD-202, Method 204, Condition B
- Shock: 100 g, 6 milliseconds, MIL-STD-202, Method 213, Condition I
- Moisture resistance: MIL-STD-202, Method 208
- Resistant to soldering heat and flux: 235°C for 30 seconds
- Solderability: MIL-STD-202, Method 208
- Withstands up to 5 minutes total immersion in typical cleaning solvents at room temperature
- Conforms with specification MIL-C-81

JMC Square Drive Tuning Tool 4192



Specifications

JMC P/N	RANGE pF	TC PPM/ $^{\circ}\text{C}$	MIN. Q @ 100 MHz	COLOR CODE	DRAWING FIGURE
2320-0	0.6 to 2.5	100 ± 200	3000	Red	A
2320-0SL	0.6 to 2.5	100 ± 200	3000	Red	C
2320-1	1.0 to 5.0	100 ± 200	1000	Black	A
2320-1SL	1.0 to 5.0	100 ± 200	1000	Black	C
2320-2	2.5 to 10.0	100 ± 200	1000	Blue	A
2320-2SL	2.5 to 10.0	100 ± 200	1000	Blue	C
2320-3	5.0 to 18.0	-450 ± 300	500	Green	A
2320-3SL	5.0 to 18.0	-450 ± 300	500	Green	C
2320-4	6.5 to 25.0	-1100 ± 300	300	Amber	A
2320-4SL	6.5 to 25.0	-1100 ± 300	300	Amber	C
2320-10	0.6 to 2.5	100 ± 200	3000	Red	B
2320-11	1.0 to 5.0	100 ± 200	1000	Black	B
2320-12	2.5 to 10.0	100 ± 200	1000	Blue	B
2320-13	5.0 to 18.0	-450 ± 300	500	Green	B
2320-14	6.5 to 25.0	-1100 ± 300	300	Amber	B

Prototyping Kit

JMC KIT JK-023	QUANTITY	RANGE pF
2320-0	4	0.6 to 2.5
2320-1	4	1.0 to 5.0
2320-2	4	2.5 to 10
2320-3	4	5.0 to 18
2320-4	4	6.5 to 25
4192	1	Tuning Tool
	1	12mm Tape Sample

Sealed

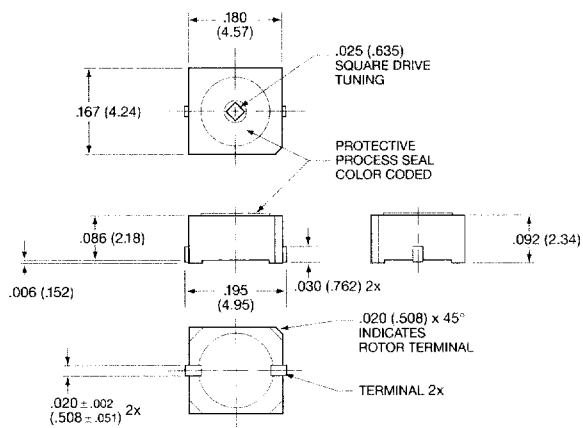


FIGURE A - SEALED

Dimensions: inches (mm)

Unsealed

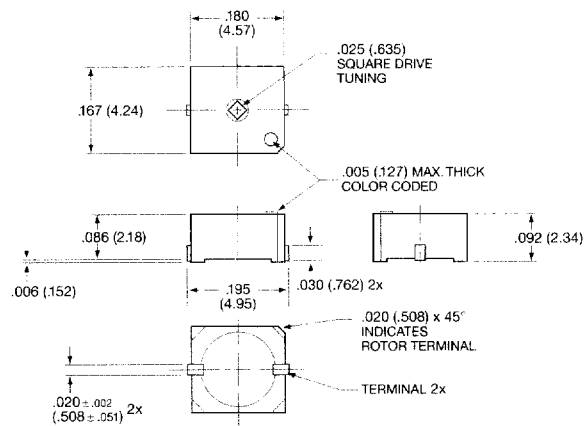


FIGURE B - UNSEALED

Dimensions: inches (mm)

Sealed SL

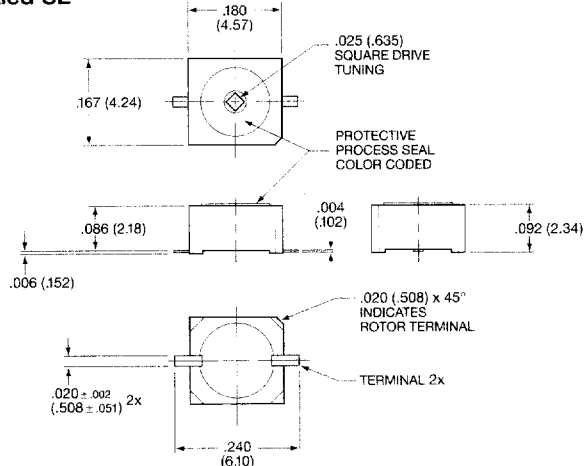


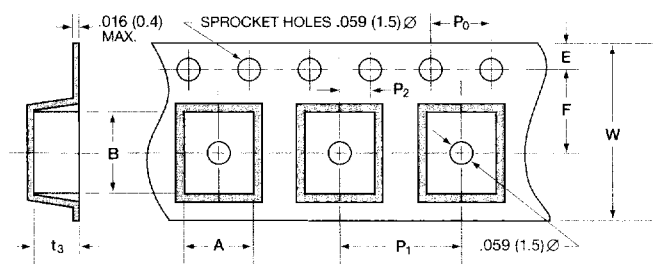
FIGURE C - SEALED

Dimensions: inches (mm)

Packaging

Johanson standard bulk packaging is supplied in quantities of 200 per sealed antistatic plastic bag. Standard tape and reel packaging is available in quantities of 500 or 2,500 pieces per reel.

Carrier Tape Dimensions - Standard

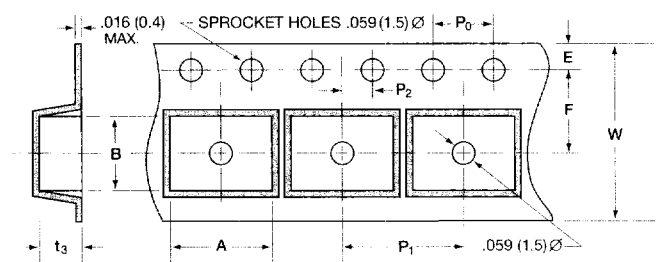


Dimensions: inches (mm)

A	B	W	E	F	P ₀	P ₁	P ₂	t ₃
.180"	.212"	.472"	.069"	.216"	.157"	.315"	.079"	.118"
4.57 mm	5.38 mm	12.0 mm	1.75 mm	5.5 mm	4.0 mm	8.0 mm	2.0 mm	3.0 mm

Add suffix to JMC P/N for reel packaging: **R1** = 500 pieces **R2** = 2500 pieces

Carrier Tape Dimensions - SL



Dimensions: inches (mm)

A	B	W	E	F	P ₀	P ₁	P ₂	t ₃
.264"	.193"	.472"	.069"	.216"	.157"	.315"	.079"	.110"
6.7 mm	4.9 mm	12.0 mm	1.75 mm	5.5 mm	4.0 mm	8.0 mm	2.0 mm	2.8 mm

Add suffix to JMC P/N for reel packaging: **R1** = 500 pieces **R2** = 2500 pieces