

# RoHS Compliant Mini-TurboCap™



## Small Footprint, High Volumetric Efficiency, High-CV SMPS Capacitors



The RoHS Compliant Mini-TurboCap™ is constructed from state-of-the-art BME (Base Metal Electrode) MLC Capacitors achieving very high CV, as well as, ultra low ESR and ESL. The resulting, very large capacitance values allow for component and board space reduction. Stress relieving lead frames provide effective mechanical decoupling of the ceramic chips from the board, minimizing the stress created by board flexing, vibration and temperature cycling. High temperature solder is used to attach chips to the lead frame thus eliminating the risk of solder reflow during assembly to the board.

### CAPACITANCE RANGE

	VOLTAGE	
Style	50V	100V
RT10	18 $\mu$ F	8.2 $\mu$ F

### HOW TO ORDER

<b>RT10</b>	<b>5</b>	<b>C</b>	<b>186</b>	<b>M</b>	<b>A</b>	<b>K</b>	<b>02</b>
<b>AVX Style</b>	<b>Voltage</b> 50V = 5 100V = 1	<b>Temperature Coefficient</b> X7R = C	<b>Capacitance Code</b> (2 significant digits + no. of zeros) 1 $\mu$ F = 105 10 $\mu$ F = 106	<b>Capacitance Tolerance</b> M = $\pm$ 20%	<b>Test Level</b> A = Standard	<b>Termination</b> N = Straight Lead K = Leads formed in M = Leads formed out	<b>Number of Leads Per Side</b> 02 = 2

### ELECTRICAL SPECIFICATIONS

#### Temperature Coefficient

$\pm$ 15%, -55° to +125°C

#### Capacitance Test (MIL-STD-202, Method 305)

25°C, 1.0 $\pm$ 0.2 Vrms (open circuit voltage) at 1KHz

#### Dissipation Factor

5% Max @ 25°C, for 50VDC and 100VDC voltage ratings

#### Insulation Resistance 25°C (MIL-STD-202, Method 302)

500 M $\Omega$ - $\mu$ F

#### Insulation Resistance 125°C (MIL-STD-202, Method 302)

50 M $\Omega$ - $\mu$ F

#### Dielectric Withstanding Voltage 25°C (Flash Test)

250% rated voltage for 5 seconds with 50 mA max charging current.

#### Life Test Capabilities (1000 hrs)

150% rated voltage at +125°C.

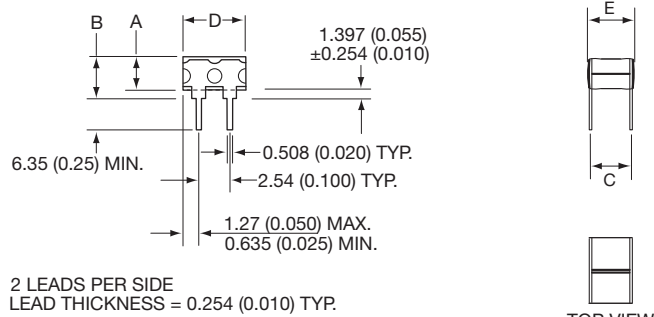


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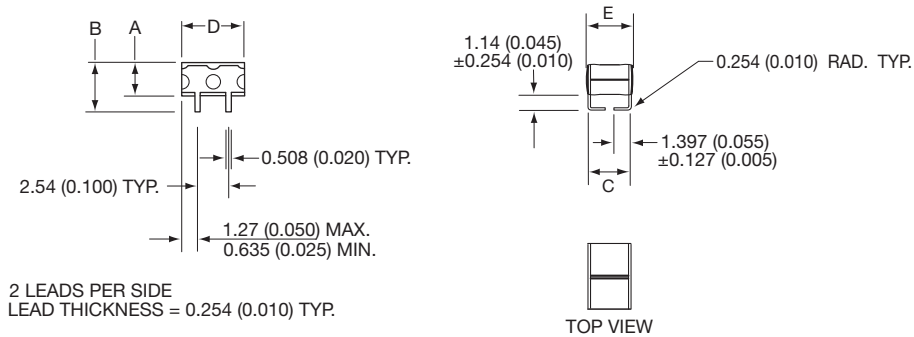


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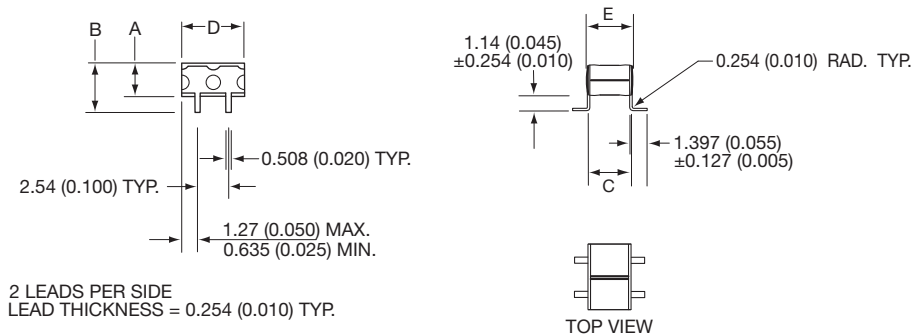
## STYLE/DIMENSIONS



**"N" STYLE LEADS**



**"K" STYLE LEADS**



**"M" STYLE LEADS**

## DIMENSIONS

millimeters (inches)

Style	A (max.)	B (max.)	C ± 0.635 (± 0.025)	D ± 0.635 (± 0.025)	E (max.)	No. of Leads Per Side
RT10	5.59 (0.220)	7.00 (0.275)	3.81 (0.150)	5.33 (0.210)	4.83 (0.190)	02

