

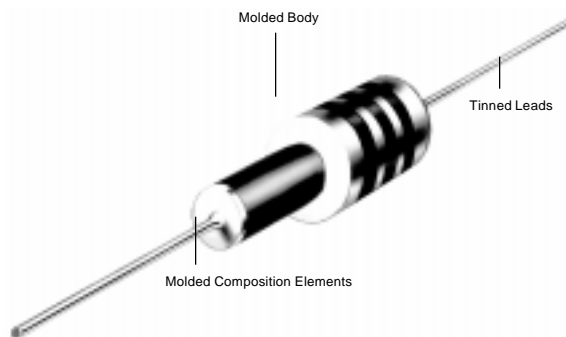
CARBON COMPOSITION RESISTOR

ISO-9001 Registered



IBT SERIES

- Meets performance standards of EIA RS-172
- Hot molded process for product uniformity
- Ideal for pulse-load handling



PERFORMANCE CHARACTERISTICS (TESTED PER MIL-STD-202):

ELECTRICAL	IBT 1/4	IBT 1/2
POWER RATING Determined by load life test 100% load at 70°C ambient	1/4W	1/2W
RATED CONTINUOUS WORKING VOLTAGE (RCWV)	$\sqrt{P \times R}$ or 250 volts whichever is less	$\sqrt{P \times R}$ or 350 volts whichever is less
MAXIMUM AMBIENT TEMPERATURE Resistors derated to zero load at this temperature	± 130°C	± 130°C
NOMINAL RESISTANCE RANGE	1Ω - 5.6 megΩ	1Ω-20 megΩ
Standard Resistance Tolerances	±5%, ±10%	±5%, ±10%
DIELECTRIC WITHSTAND VOLTAGE		
Atmospheric Pressure	500V	700V
Barometric pressure 3.4" Hg 115 millibars	325V	450V
INSULATION RESISTANCE (min.)	10,000 meg	10,000 meg
VOLTAGE COEFFICIENT OF RESISTANCE		
% resistance change/volt at 10% and 100% RCWV for values 1K to 20meg	(min) -0.005% (max) -0.032%	-0.005% -0.032%
SHORT-TIME OVERLOAD		
Apply 2.5 times RCWV at maximum Indicated for 5 seconds	Maximum voltage 700V Typical resistance change ±0.5% Maximum resistance change ±2%	700V ±0.5% ±2%

RESISTANCE TEMPERATURE CHARACTERISTICS:

	Resistance Range	-55°C	-105°C
Maximum percent resistance change from room temperature (+25°C) value	under 1K	+2.0 to +5.0	-4.0 to -2.0
	1K to 9.1K	+5.0 to +9.0	-5.0 to -3.0
	10K to 91K	+8.0 to +11.0	-7.0 to -5.0
	100K to 910K	+10.0 to + 14.0	-9.0 to -7.0
	1 meg to 10 meg	13.0 to + 20.0	-14.0 to -9.0

DIMENSIONS (Inches and (mm)):

				PACKAGING: 5000/reel 1000/bulk	
IRC Type	A	B	C		D
IBT 1/4	1.102±0.032 (28.00±0.80)	0.248±0.028 (6.3±0.70)	0.024±0.002 (0.60±0.05)	0.094±0.004 (2.40±0.10)	
IBT 1/2	1.024±0.032 (26.00±0.80)	0.374+0.032/-0.028 (9.50+0.80/-0.70)	0.0275±0.002 (0.70±0.05)	0.142±0.008 (3.6±0.20)	

Mouser Electronics

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[IBT1/2 470 5%](#) [IBT1/4 47K 5%](#)