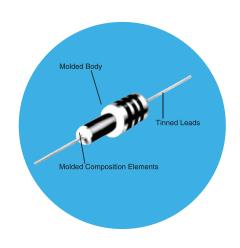
Resistors



Carbon Composition Resistor

IBT Series

- Meets performance standards of EIA RS-172
- Hot molded process for product uniformity
- Ideal for pulse-loaded handling
- Non-inductive design





All parts are Pb-free and comply with EU Directive 2011/65/EU amended by (EU) 2015/863 (RoHS3)

Electrical Data

Tested Per MIL-STD-202				
	IBT 1/4	IBT 1/2		
Equivalent Allen Bradley reference	RC07	RC20		
Power Rating Determined by load life test 100% load @ 70°C ambient	1/4W	1/2W		
Rated Continuous Working Voltage (RCWV)	P x R or 250 volts whichever is less	P x R or 350 volts whichever is less		
Maximum Ambient Temperature Resistors derated to zero load at this temperature	+130°C			
Nominal Resistance Range	1 Ω - 5.6 meg Ω	1 Ω - 20 meg Ω		
Standard Resistance Tolerances	<100K: 5%, 10%	, ≥100K: 10%		
Dielectric Withstand Voltage Atmospheric Pressure Barometric pressure 3.4" Hg 115 millibars	500V 325V	700V 450V		
Insulation Resistance (min.)	10,000 meg	10,000 meg		
Voltage Coefficient of Resistance % resistance change/volt at 10% and (min.) 100% RCWV for values 1K to 20 meg (max.)	005% 032%	005% 032%		
Short-Time Overload Maximum Voltage Apply 2.5 times RCWV at maximum Typical resistance change Indicated for 5 seconds Maximum resistance change	700V ±0.5% ±2%	700V ±0.5% ±2%		

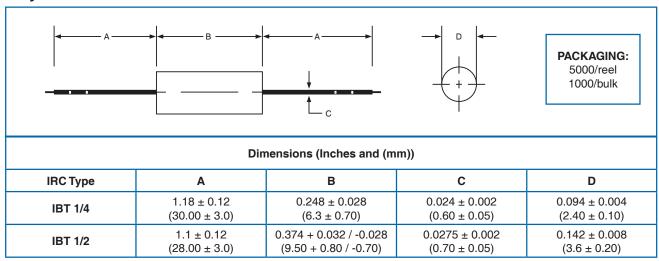


IBT Series

Resistance Temperature Characteristics

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

Physical Data



Application notes - Lead forming within 2mm of the body and soldering within 4mm of the body are not recommended. Owing to the hydroscopic nature of carbon composition technology, aqueous washing is not recommended.

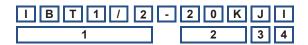


IBT Series

Ordering Procedure

This product has two valid part numbers:

European (Welwyn) Part Number: IBT1/2-20KJI (IBT1/2, 20 kilohms ±5%, Pb-free)



1	2	3		4	
Type	Value	Tolerance	Packing &	Termination Finish	
IBT1/4	3/4 characters	$J = \pm 5\%$	I = Tape Pack & Pb-free		
IBT1/2	R = ohms	K = ±10%	All sizes	Taped, 5000/reel	
	K = kilohms M = megohms				

USA (IRC) Part Number: IBT1/2203JLFLTR (IBT1/2, 20 kilohms ±5%, Pb-free)



1	2	3	4	5	
Туре	Value	Tolerance	Termination Finish	Packing	
IBT1/4	2 digits + multiplier	J = ±5%	LF = Pb-free	LTR = Lead Tape	
IBT1/2	R = ohms for values	K = ±10%		Omit for Bulk Pack	
	<10 ohms			All sizes	5000/reel
,		•			1000/bulk

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

TT Electronics:

RC20GF560J RC20GF621J RC20GF220JTR RC20GF751J RC20GF360J RC20GF684J RC20GF682J RC20GF680J RC20GF683J RC20GF391J RC20GF393J RC20GF390J RC20GF103J RC20GF123J RC20GF101J RC20GF121J RC20GF104J RC20GF105J RC20GF221J RC20GF2R2J RC20GF222J RC20GF224J RC20GF2R7J RC20GF223J RC20GF220J RC20GF2R0J RC20GF2R0J RC20GF184J RC20GF184J RC20GF180J RC20GF181J RC20GF510J RC20GF510J RC20GF514J RC20GF153J RC20GF154J RC20GF151J RC20GF333J RC20GF331J RC20GF330J RC20GF120J RC20GF124J RC20GF203J RC20GF152J RC20GF274J RC20GF274J RC20GF271J RC20GF8R2J RC20GF4R7J RC20GF304J RC20GF301J RC20GF301J RC20GF202J RC20GF204J RC20GF201J RC20GF332J RC20GF750J RC20GF474J RC20GF470J RC20GF472J RC20GF473J RC20GF471J RC20GF111J RC20GF114J RC20GF106J RC20GF102J RC20GF561J RC20GF561J RC20GF620J RC20GF671J RC20GF111J RC20GF114J RC20GF106J RC20GF4R7JR RC20GF561J RC20GF620J RC20GF62