

CURRENT 10 Ampere
VOLTAGE RANG 40 to 200 Volts

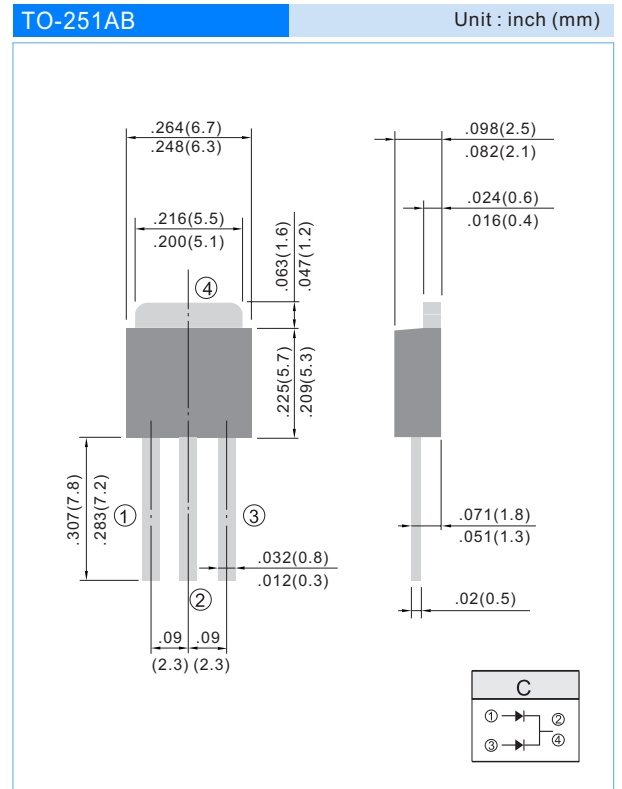
BD1040CT THRU BD10200CT

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For through hole applications
- Low profile package
- Built-in strain relief
- Low power loss, High efficiency
- High surge capacity
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- In compliance with EU RoHS 2002/95/EC directives

MECHANICAL DATA

- Case: TO-251AB molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: As marking
- Weight: 0.0104 ounces, 0.297 grams.



MAXIMUM RATINGS

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%

PARAMETER	SYMBOL	DB10 40CT	DB10 45CT	DB10 50CT	DB10 60CT	DB10 80CT	DB10 90CT	DB10 100CT	DB10 150CT	DB10 200CT	UNITS	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	40	45	50	60	80	90	100	150	200	V	
Maximum RMS Voltage	V_{RMS}	28	31.5	35	42	56	63	70	105	140	V	
Maximum DC Blocking Voltage	V_{DC}	40	45	50	60	80	90	100	150	200	V	
Maximum Average Forward (See Figure 1)	$I_{F(AV)}$	10									A	
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	100									A	
Maximum Forward Voltage at 5.0A per leg	V_F	0.70		0.75		0.80			0.90		V	
Maximum DC Reverse Current at $T_J=25^{\circ}C$ Rated DC Blocking Voltag $T_J=100^{\circ}C$	I_R						0.05				mA	
Typical Thermal Resistance	$R_{\theta JC}$						3.0				$^{\circ}C / W$	
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150								-65 to +175		$^{\circ}C$

NOTES:

Both Bonding and Chip structure are available.

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RATING AND CHARACTERISTIC CURVES

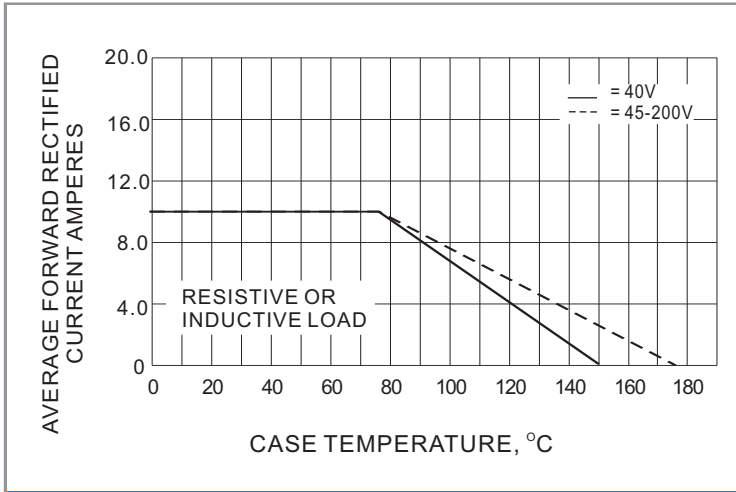


Fig.1- FORWARD CURRENT DERATING CURVE

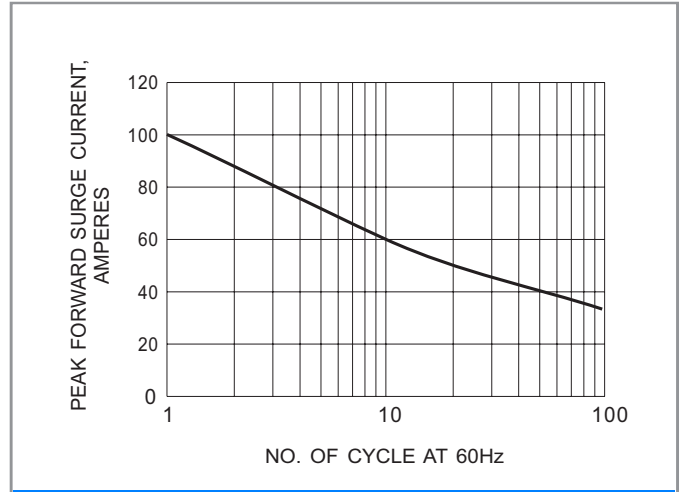


Fig.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

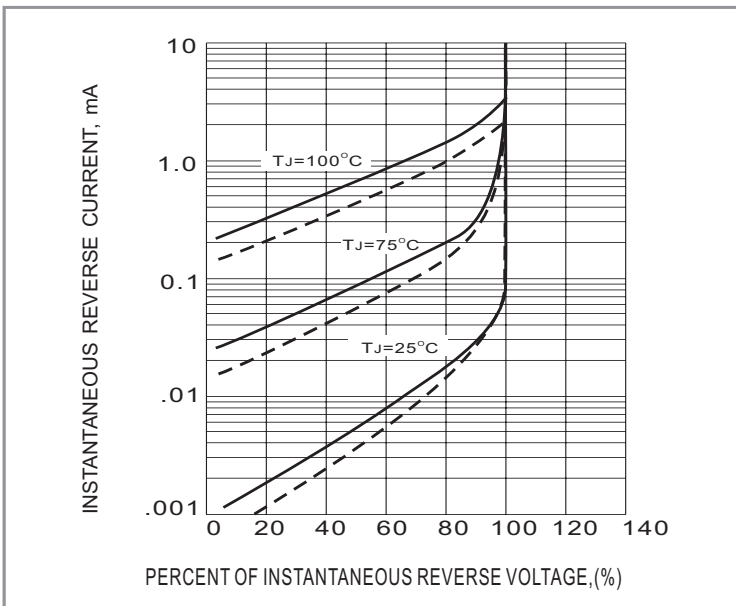


Fig.3- TYPICAL REVERSE CHARACTERISTICS

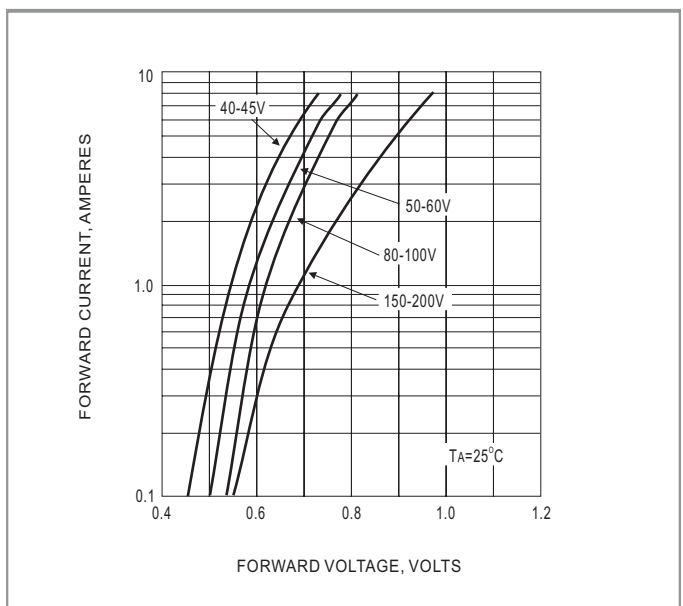


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC