

BD1040CT~BD10200CT

SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 40 to 200 Volts **CURRENT** 10.0 Amperes

FEATURES

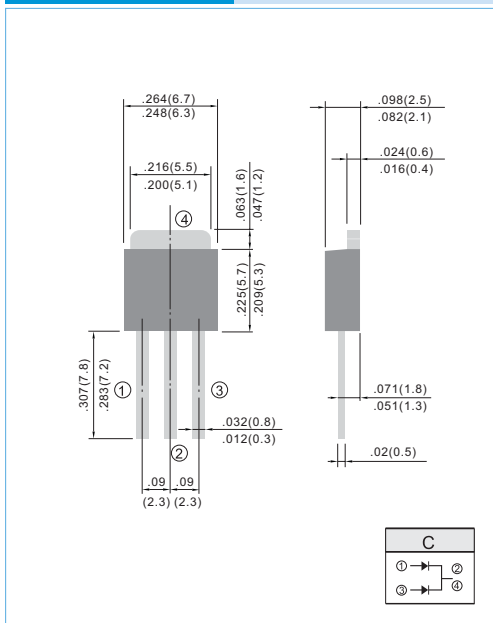
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For through hole applications
- Low profile package
- Built-in strain relief
- Low power loss, High efficiency
- High surge capacity
- For use in low voltage high frequency inverters, free wheeling, and polarity protection 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.

TO-251AB

Unit : inch (mm)



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	BD1040CT	BD1045CT	BD1050CT	BD1060CT	BD1080CT	BD1090CT	BD10100CT	BD10150CT	BD10200CT	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°C Rated DC Blocking Voltag T _J =100°C	I _R	0.05 20									mA
Typical Thermal Resistance	R _{θJC}	3.0									°C / W
Operating Junction and Storage Temperature Range	T _J , T _{STG}	-55 to +150	-65 to +175								°C

NOTES:

Both Bonding and Chip structure are available.

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RATING AND CHARACTERISTIC CURVES

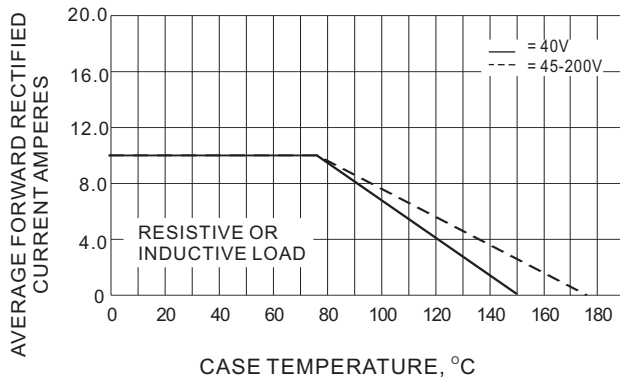


Fig.1- FORWARD CURRENT DERATING CURVE

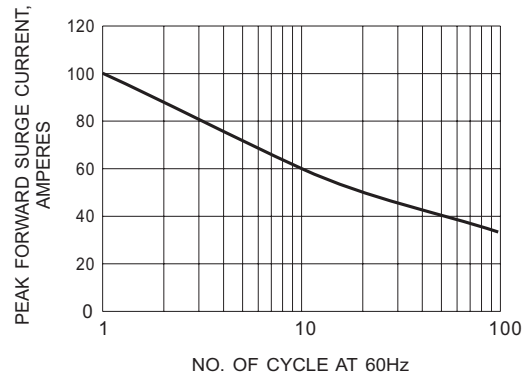


Fig.2- MAXIMUM NON - REPETITIVE FORWARD SURGE CURRENT

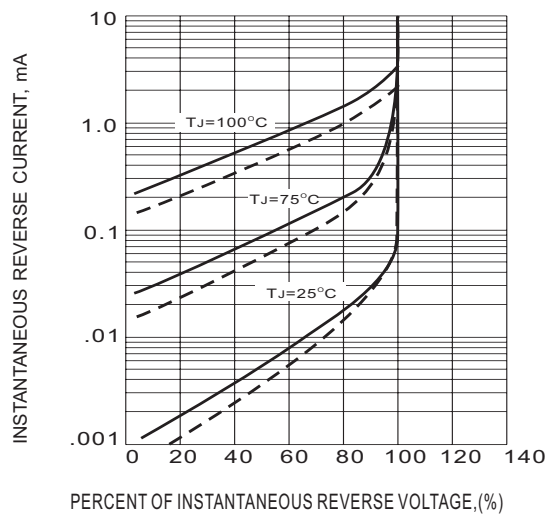


Fig.3- TYPICAL REVERSE CHARACTERISTICS

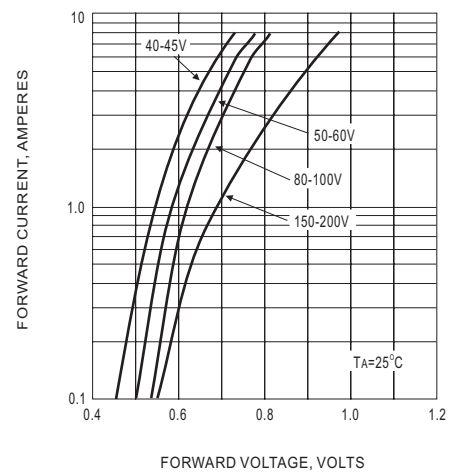


Fig.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC