PANJIT SEMI CONDUCTOR

MBR4040PT SERIES

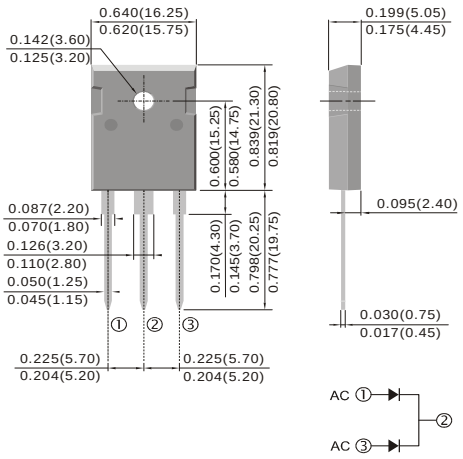
SCHOTTKY BARRIER RECTIFIERS

VOLTAGE 40 to 200 Volt **CURRENT** 40 Ampere

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O. Flame Retardant Epoxy Molding Compound.
- Low power loss, high efficiency.
- High current capability
- For use in low voltage,high frequency inverters free wheeling, and polarlity protection applications.
- Lead free in compliance with EU RoHS 2011/65/EU directive

TO-247AD / TO-3P Unit : inch(mm)



MECHANICAL DATA

- Case: TO-247AD/TO-3P molded plastic
- Terminals: solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: As marked.
- Weight: 0.224 ounces, 6.367 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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	MBR4040PT	MBR4045PT	MBR4050PT	MBR4060PT	MBR4080PT	MBR4090PT	MBR40100PT	MBR40150PT	MBR40200PT	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 Current	$I_{F(AV)}$	40									A
Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	350									A
Maximum Forward Voltage at 20A per leg	V_F	0.7		0.79		0.8			0.9		V
Maximum DC Reverse Current at T_J=25°C Rated DC Blocking Voltage T_J=125°C	I_R	0.1 20						0.05 20			mA
Typical Thermal Resistance	$R_{\theta JC}$	1.2									°C / W
Operating Junction and Storage Temperature Range	T_J,T_{STG}	-55 to + 150	-65 to +175								°C

Note :

Both Bonding and Chip structure are available.

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RATING AND CHARACTERISTIC CURVES

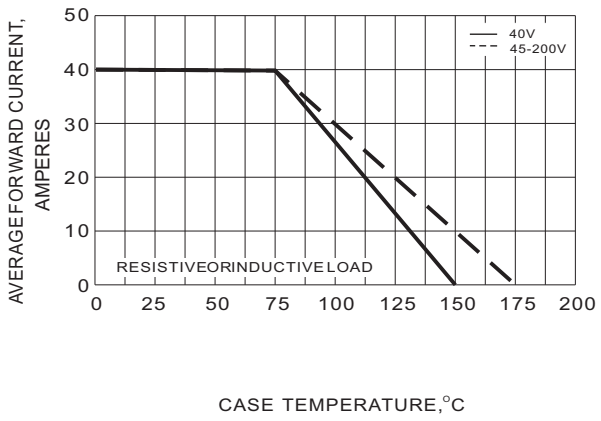

Fig.1 FORWARD CURRENT DERATING CURVE

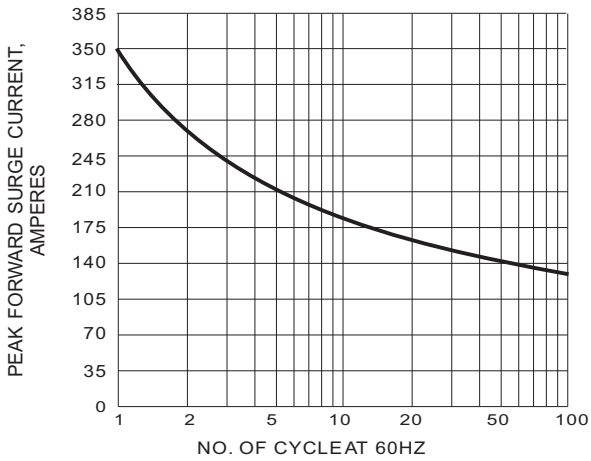

Fig.2 MAXMUM NON-REPETITIVE SURGE CURRENT

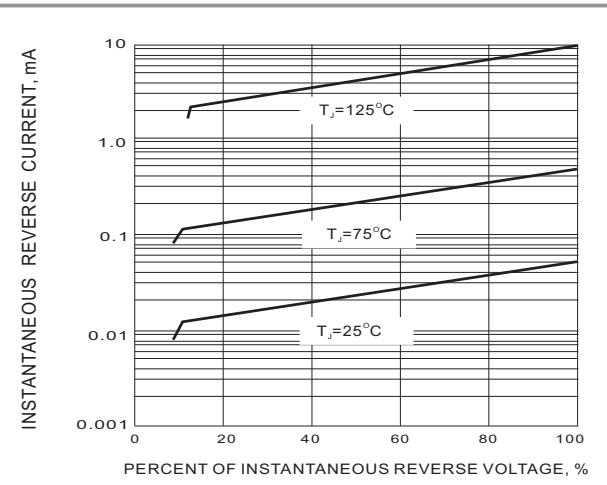

Fig.3 TYPICAL REVERSE CHARACTERISTIC

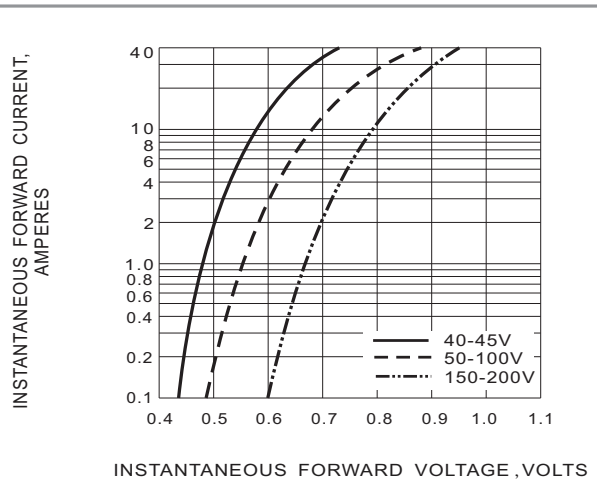

Fig.4 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

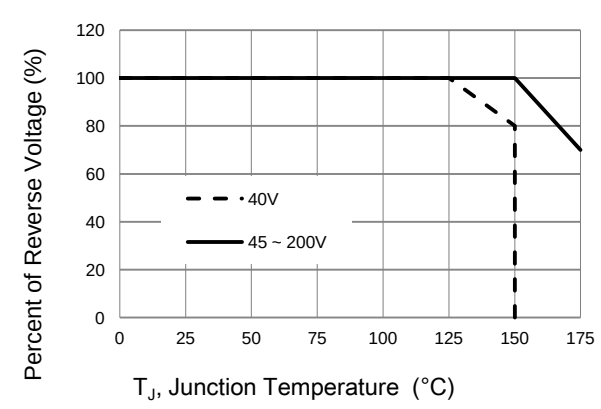

Fig.5 Operating Temperature Derating Curve

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