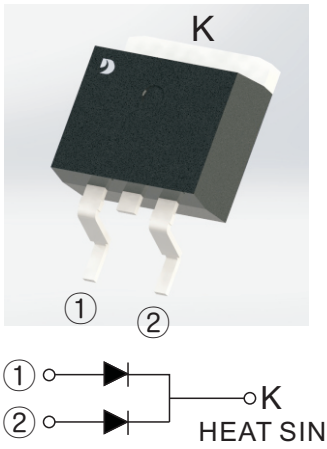
SCHOTTKY BARRIER RECTIFIERS

Reverse Voltage - 40 to 200 V

Forward Current - 40 A

TO-263(D^2PAK)



FEATURES

- High current capability
- Low forward voltage drop
- Low power loss, high efficiency
- High surge capability
- High temperature soldering guaranteed
- Mounting position: any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified

CHARACTERISTICS	SYMBOL	MBR4040CG	MBR4045CG	MBR4060CG	MBR40100CG	MBR40150CG	MBR40200CG	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	40	45	60	100	150	200	V
Maximum RMS voltage	V_{RMS}	28	31.5	42	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	40	45	60	100	150	200	V
Maximum Average Forward Rectified Current per diode / per device	$I_{F(AV)}$	20 40						A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) per diode	I_{FSM}	250						A
Max Instantaneous Forward Voltage at 20 A DC Per leg	V_F	0.70		0.75	0.85	0.90	0.92	V
Maximum DC Reverse Current T_a = 25°C / at Rated DC Reverse Voltage T_a =125°C	I_R	0.1 20			0.05 20			mA
Typical Junction Capacitance (1)	C_j	600		400				pF
Typical Thermal Resistance	$R_{\theta JA}$	45						°C/W
Operating Junction Temperature Range	T_j	-55 ~ +150				-55 ~ +175		°C
Storage Temperature Range	T_{stg}	-55 ~ +150				-55 ~ +175		°C

(1) Measured at 1 MHz and applied reverse voltage of 4 V D.C

Fig.1 TYPICAL FORWARD CURRENT DERATING CURVE

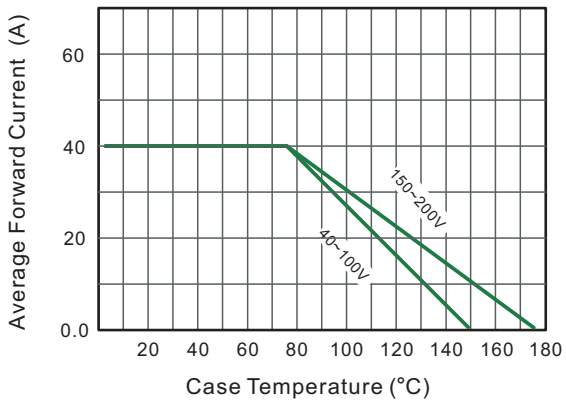


Fig.2 Typical Reverse Characteristics

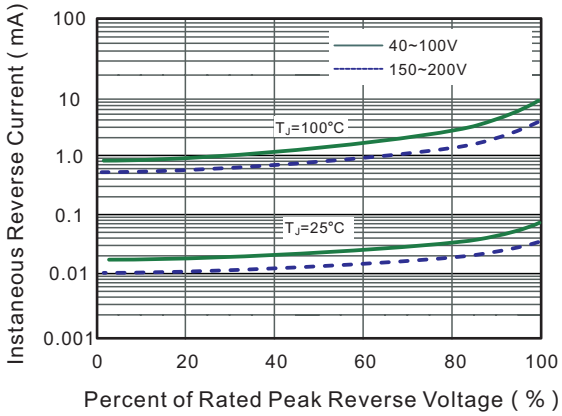


Fig.3 Typical Forward Characteristic(per leg)

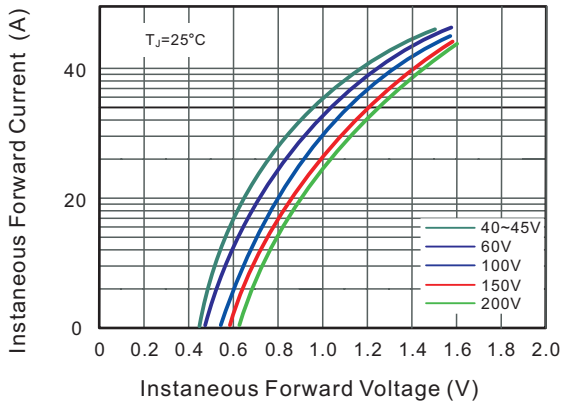


Fig.4 Typical Junction Capacitance

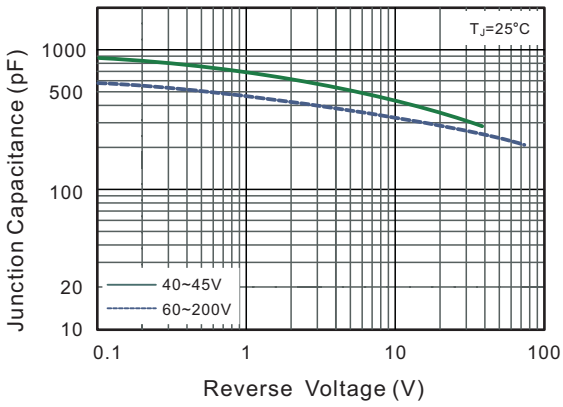


Fig.5 Maximum Non-Repetitive Peak Forward Surage Current

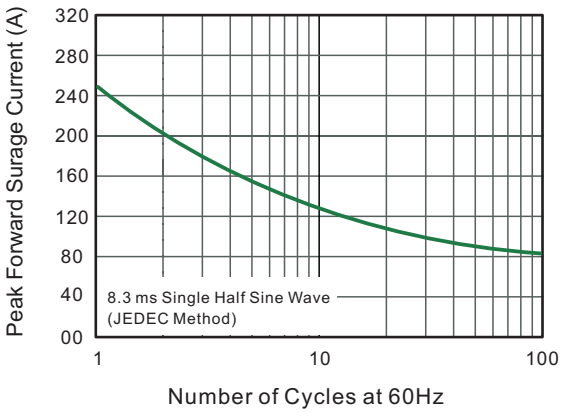
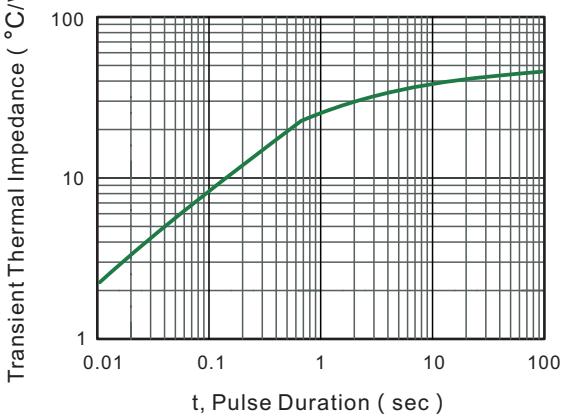
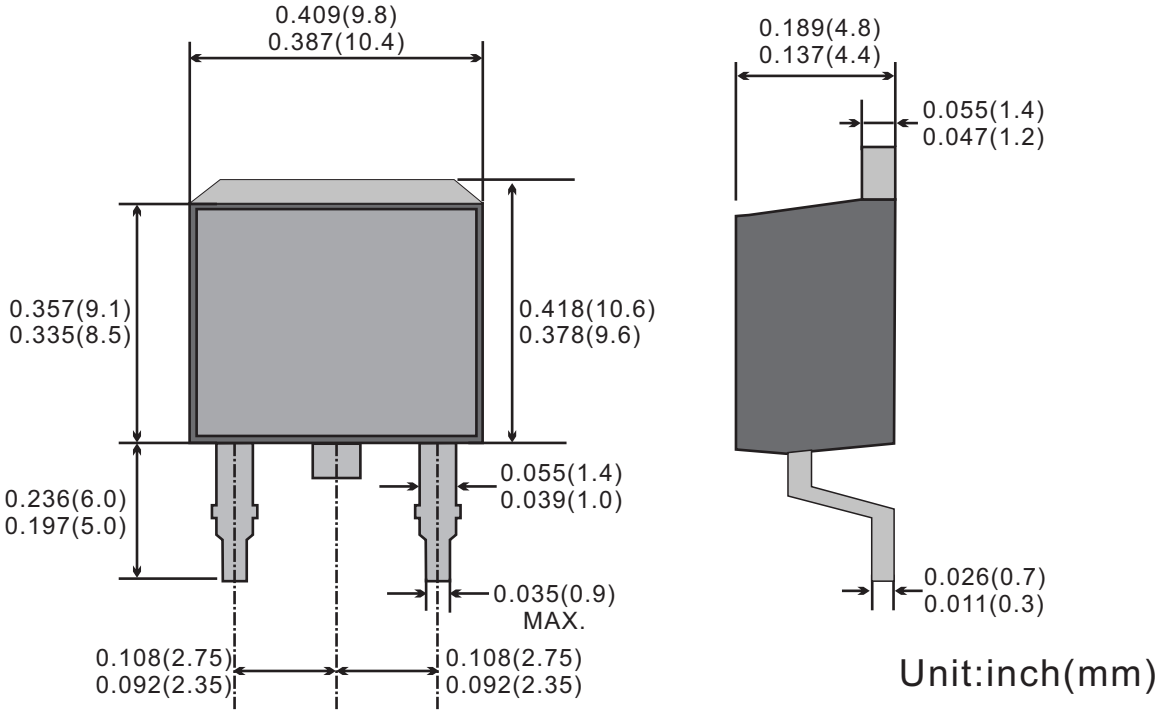


Fig.6- Typical Transient Thermal Impedance



TO-263(D-P^{2}AK) Package Outline Dimensions



Unit:inch(mm)

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