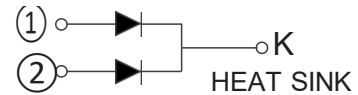


SCHOTTKY BARRIER GLASS PASSIVATED RECTIFIERS

FEATURES

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

TO-263(D²PAK)



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

MCHARACTERISTICS	SYMBOL	MBRB 4045	MBRB 4060	MBRB 40100	MBRB 40150	MBRB 40200	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	45	60	100	150	200	V
Maximum RMS voltage	V _{RMS}	32	42	70	105	140	V
Maximum DC blocking voltage	V _{DC}	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 device	I _{FSM}	250		200			A
Maximum instantaneous forward voltage at 20A DC Per leg	V _F	0.70	0.75	0.85	0.95		V
Maximum DC reverse current at rated DC blocking voltage T _A =25℃ T _A =125℃	I _R	0.1					mA
		20	30	10			
Typical junction capacitance (NOTE 1)	C _J	800	600				pF
Typical thermal resistance (NOTE 2)	R _{θJA}	45					℃/W
Operating junction temperature range	T _J	-55 to +150					℃
Storage temperature range	T _{STG}	-55 to +150					℃

Note: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V D.C.

2. PCB. Mounted on 10cm x 10cm x 1mm copper pad areas

The typical data above is for reference only.

Typical Characteristics

Fig.1 TYPICAL FORWARD CURRENT DERATING CURVE

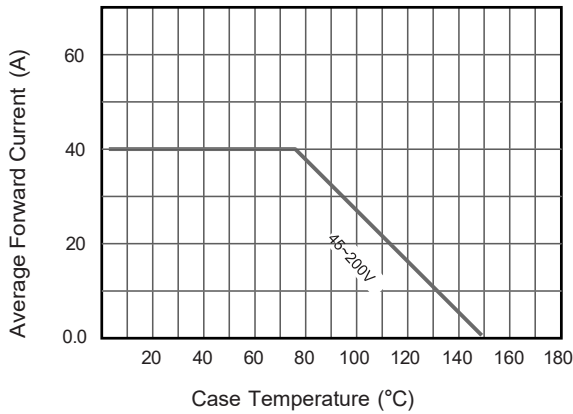


Fig.2 Typical Reverse Characteristics

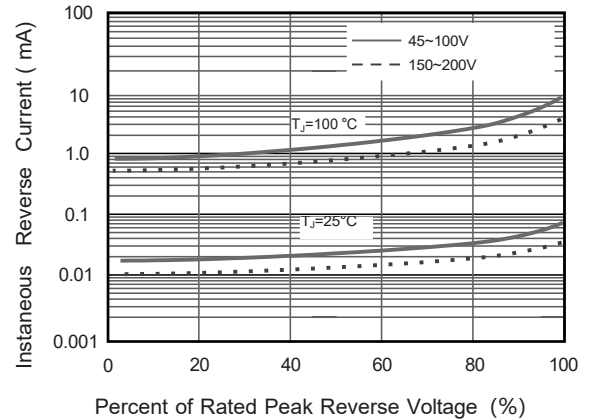


Fig.3 Typical Forward Characteristic(per leg)

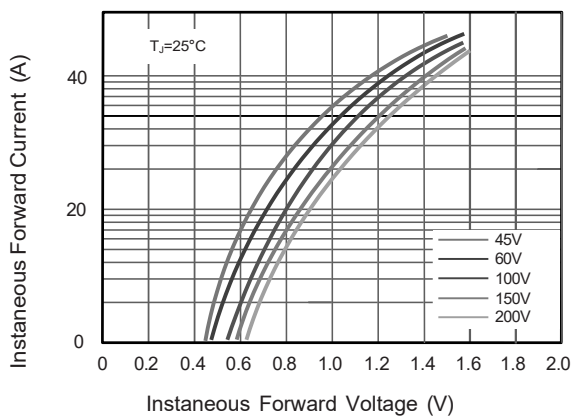


Fig.4 Typical Junction Capacitance

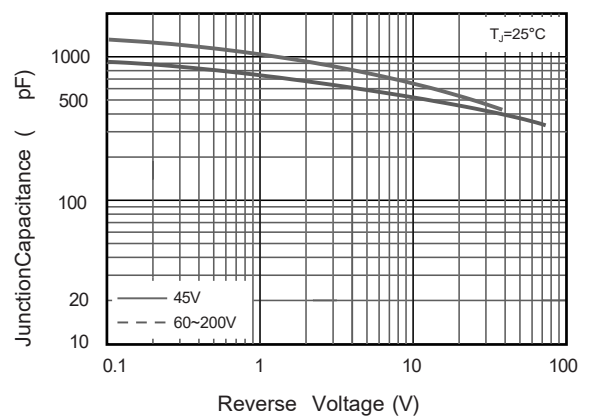


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

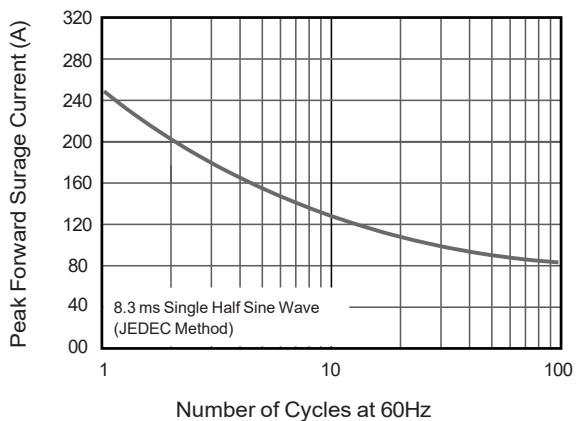
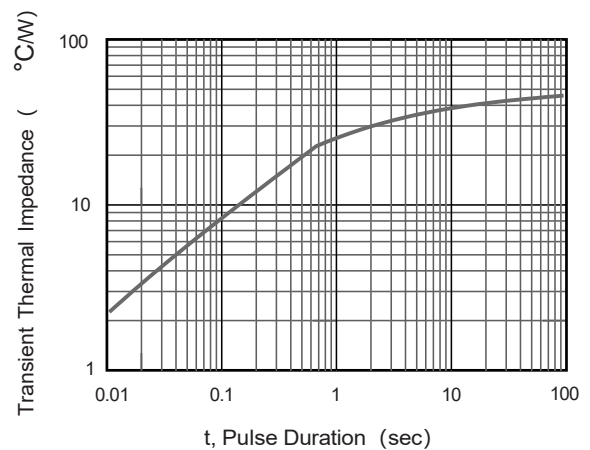


Fig.6- Typical Transient Thermal Impedance



The curve above is for reference only.