

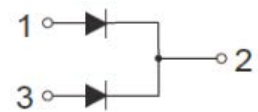


Features

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



TO252-2L



Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
MBRD1040CT- MBRD10200CT	TO-252-2L	MBRD10✱	2500

✱:From 40-200CT

Maxmim Ratings Electrcal Charcteristics

Ratings at 25°C ambient temperature unless otherwise specified

Characteristics	Symbol	MBRD 1040CT	MBRD 1045CT	MBRD 1060CT	MBRD 10100CT	MBRD 10150CT	MBRD 10200CT	Units
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	40	45	60	100	150	200	V
Maximum RMS voltage	V _{RMS}	28	32	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)}	5 10						A
Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) Per leg	I _{FSM}	100						A
Max Instantaneous Forward Voltage at 5.0 A Per leg	V _F	0.70		0.75	0.85	0.90	0.92	V
Maximum DC Reverse Current at Rated DC Reverse Voltage T _a = 25°C 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 ⁽²⁾	R _{θJA}	35						°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

(2) P.C.B. mounted with 10cmX10cmX1mm copper pad areas.



Typical Characteristics

Fig.1 TYPICAL FORWARD CURRENT DERATING CURVE

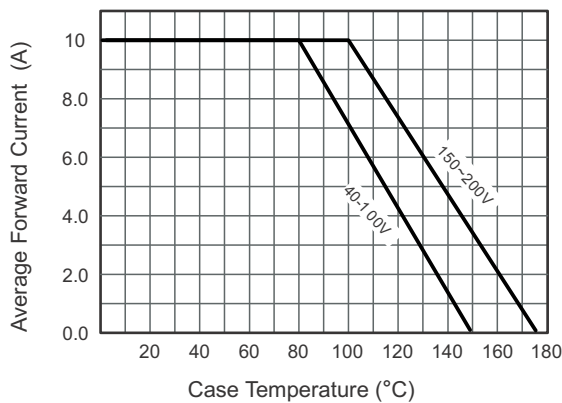


Fig.2 Typical Reverse Characteristics

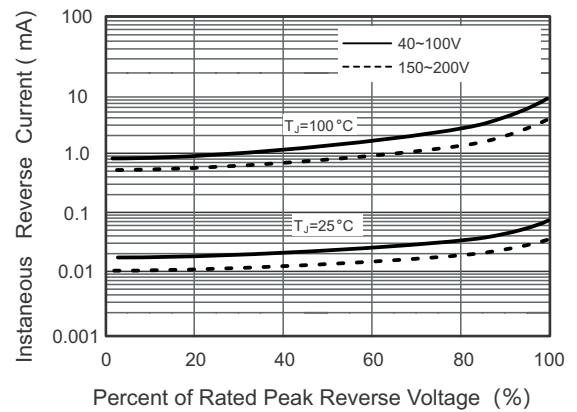


Fig.3 Typical Forward Characteristic

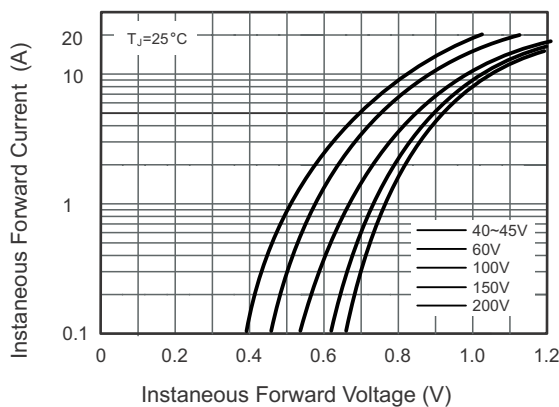


Fig.4 Typical Junction Capacitance

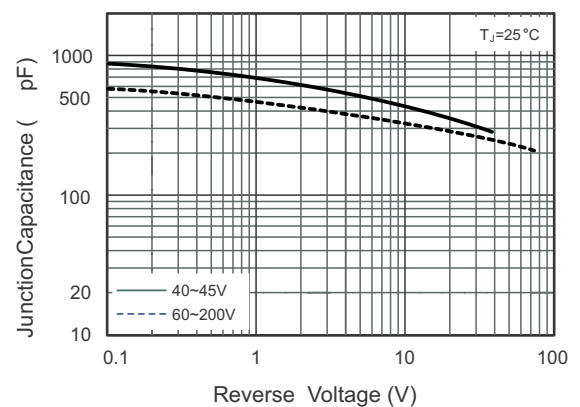


Fig.5 Maximum Non-Repetitive Peak Forward Surge Current

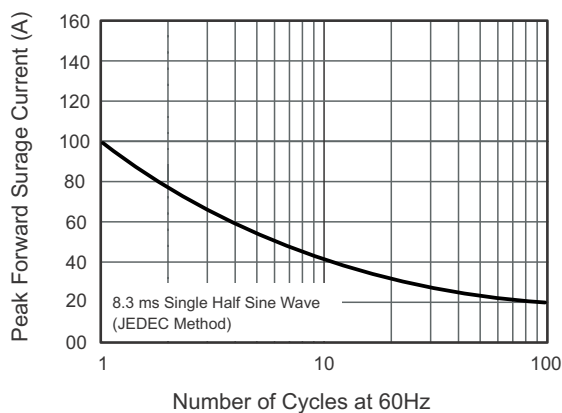
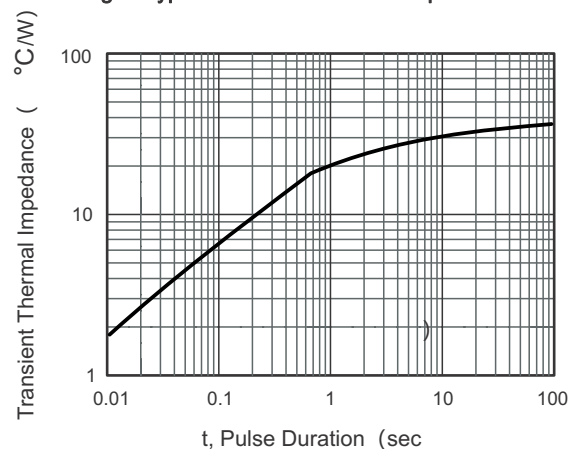
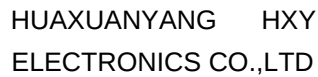
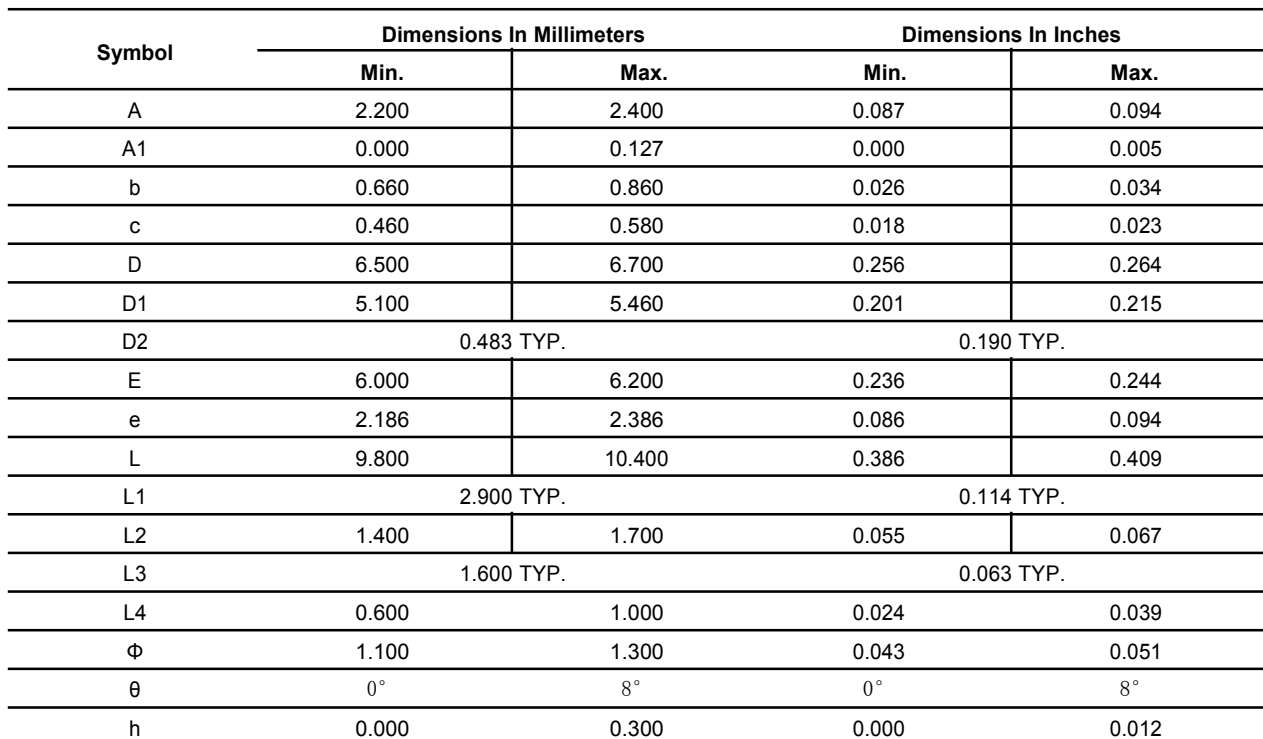


Fig.6- Typical Transient Thermal Impedance





TO-252-2L Package Information





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