

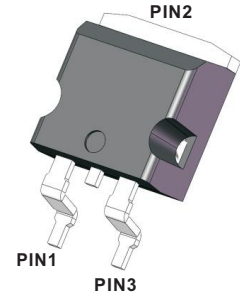
EXTREME LOW VF SCHOTTKY BARRIER RECTIFIERS

Reverse Voltage - 100V

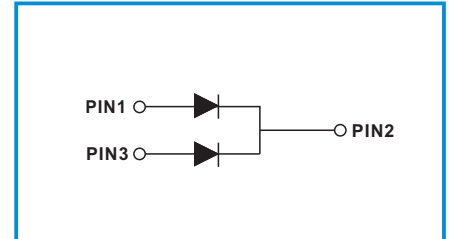
Forward Current - 40A

Features

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



Functional Diagram



Mechanical Data

- Case: TO-263-2L
- Approx. Weight: 1.52g (0.053oz)
- Lead free finish, RoHS compliant
- Case Material: "Green" molding compound, ULflammability classification 94V-0, "Halogen-free".
- Marking: MBR40100GD

Maximum Ratings and Characteristics

Ratings at 25°C ambient temperature unless otherwise specified

PARAMETER	Symbols	LTM40100GD	Unit
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	100	V
Maximum RMS voltage	V_{RMS}	70	V
Maximum DC Blocking Voltage	V_{DC}	100	V
Maximum Average Forward Rectified Current Per leg 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 leg)	I_{FSM}	250	A
Operating Junction Temperature Range	T_j	-55 ~ +150	°C
Storage Temperature Range	T_{stg}	-55 ~ +150	°C
Typical thermal resistance *	$R_{\theta JC}$	4	°C/W

* Thermal resistance from junction to case

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	Units
Breakdown voltage(per leg)	V_{BR}	$I_R=0.5mA$	100	—	—	V
Instantaneous forward voltage(per leg)	V_F	$I_F=20A, T_J=25^\circ C$	—	0.65	0.71	V
Reverse current(per leg)	I_R	$V_R=100, T_J=25^\circ C$	—	—	0.12	mA

Ratings and characteristics Curves

Fig.1 Typical Forward Current Derating Curve

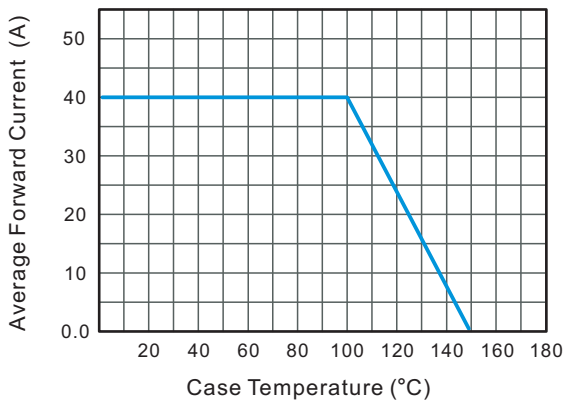


Fig.2 Typical Reverse Characteristics

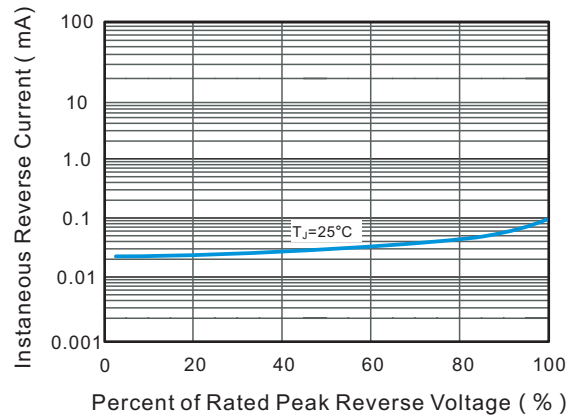


Fig.3 Typical Forward Characteristic(per leg)

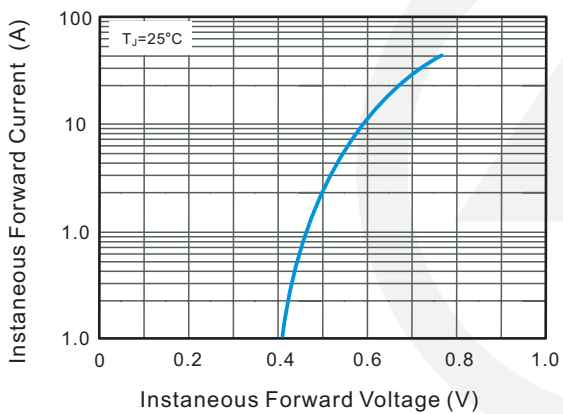
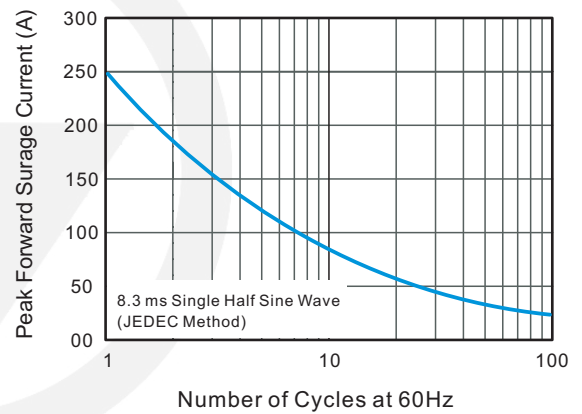
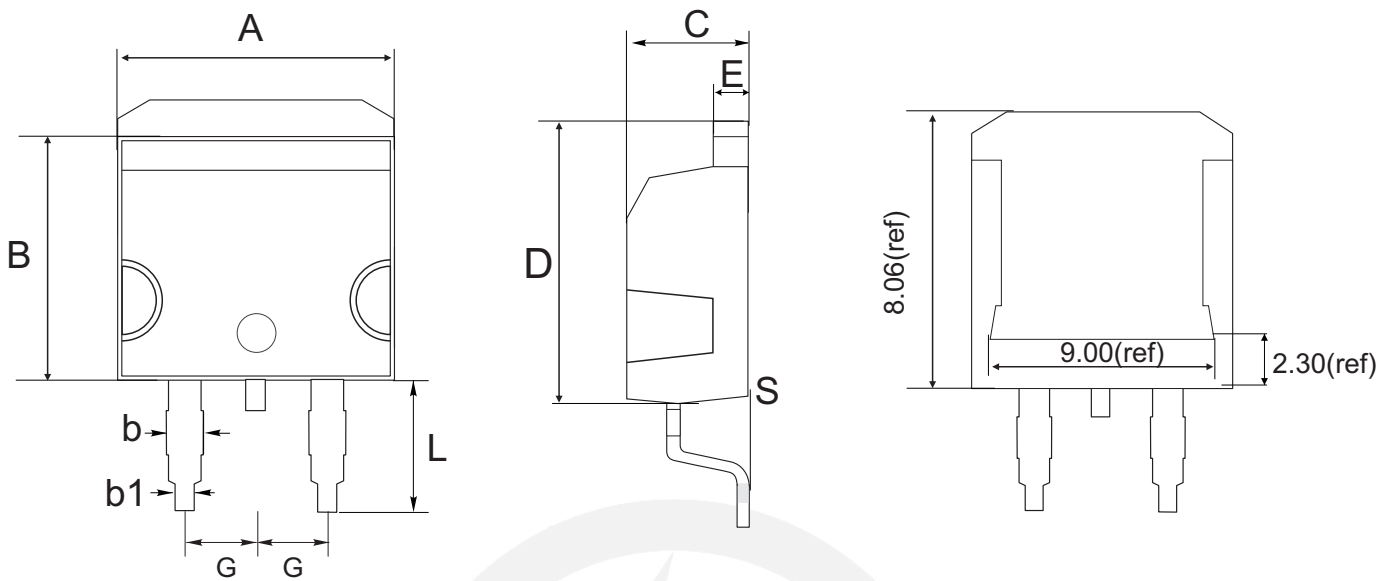


Fig.4 Maximum Non-Repetitive Peak Forward Surge Current

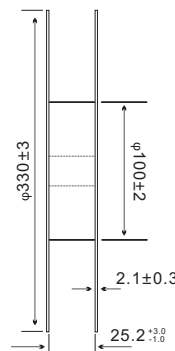
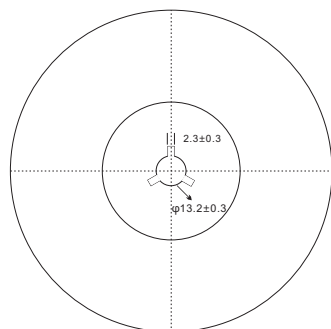


TO-263-2L Package Outline


UNIT		A	B	b	b1	C	D	E	G	H	L	a
mm	max	10.28	9.35	1.67	0.90	4.65	10.56	1.37	2.64	0.60	5.35	0.1 ref.
	typ	10.18	9.15	1.57	0.80	4.45	10.36	1.27	2.54	0.50	5.15	
	min	10.08	8.95	1.47	0.70	4.25	10.16	1.17	2.44	0.40	4.95	

Packaging

13" Reel



Quantity: 800PCS