MBRB1045 THRU MBRB10200

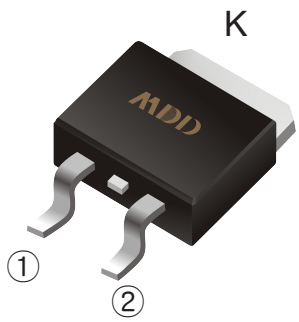
Reverse Voltage - 45 to 200 Volts Forward Current - 10.0 Ampere

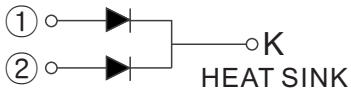
SCHOTTKY BARRIER GLASS PASSIVATED RECTIFIERS

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)





MECHANICAL DATA

Case: TO-263 molded plastic body
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.

MCHARACTERISTICS	SYMBOL	MDD MBRB 1045	MDD MBRB 1060	MDD MBRB 10100	MDD MBRB 10150	MDD MBRB 10200	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	$I_{F(AV)}$	5 10					A
Peak forward surge current 8.3ms single half sine-wave superimposed onrated load (JEDEC Method) per device	I_{FSM}	100					A
Maximum instantaneous forward voltage at 5A DC Per leg	V_F	0.60	0.75	0.85	0.95		V
Maximum DC reverse current T_A=25℃ at rated DC blocking voltage T_A=125℃	I_R	0.1 20		0.05 20			mA
Typical junction capacitance (NOTE 1)	C_J	500	300				pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	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
3.The typical data above is for reference only.

Typical Characterisitics

Fig.1 Typical Forward Current Derating Curve

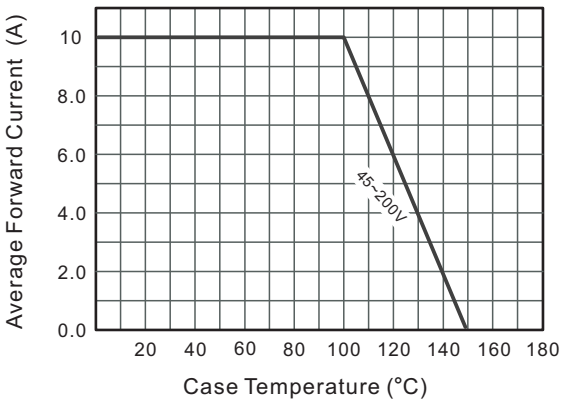


Fig.2 Typical Reverse Characteristics

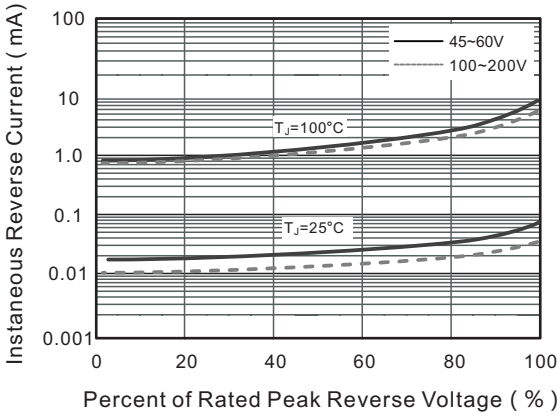


Fig.3 Typical Forward Characteristic(per leg)

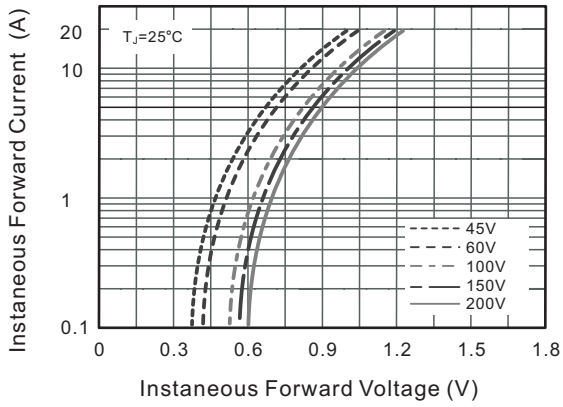
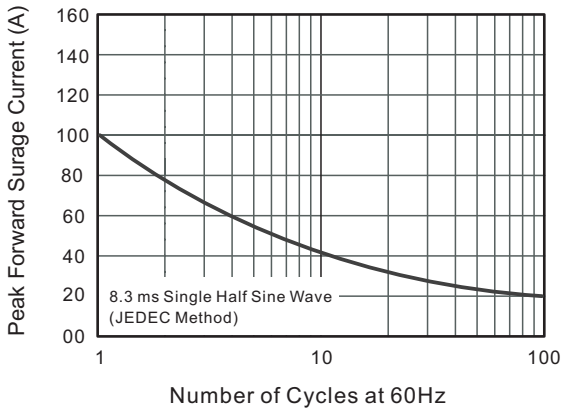
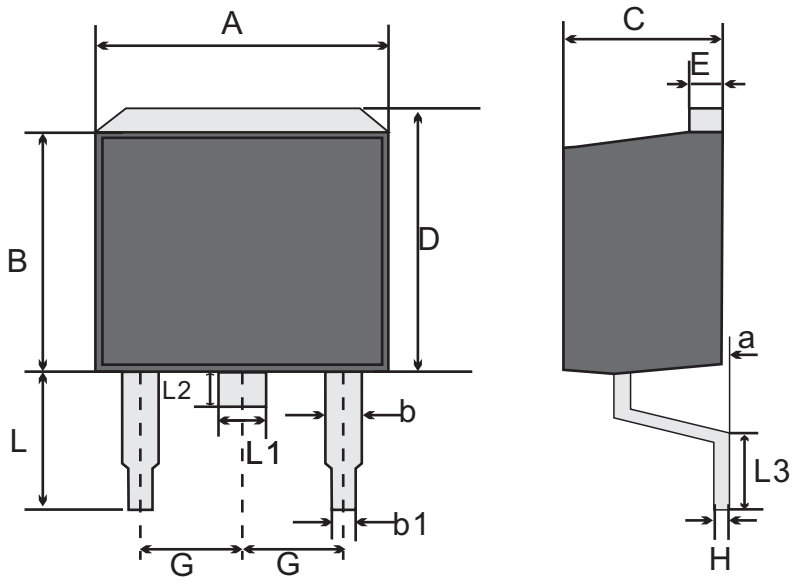


Fig.4 Maximum Non-Repetitive Peak Forward Surage Current



Outlitne Drawing

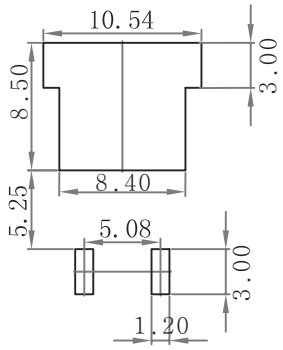
TO-263(D^2PAK) Package Outline Dimensions



TO-263(D^2PAK) mechanical data

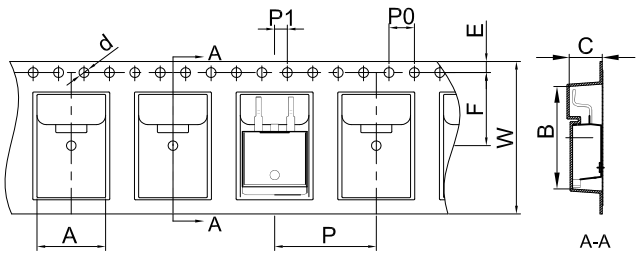
UNIT		A	B	b	b1	C	D	E	G	H	L	L1	L2	L3	a
mm	max	10.4	9.4	1.50	0.91	4.80	11.00	1.40	2.74	0.60	6.0	1.47	1.75	3.18	0.25
	min	9.6	8.4	1.07	0.70	4.30	9.68	1.20	2.34	0.30	4.1	1.07	1.0	1.7	0

Suggested Pad Layout



Note:
1. Controlling dimension:in/millimeters.
2. General tolerance: ±0.05mm.
3. The pad layout is for reference purposes only.

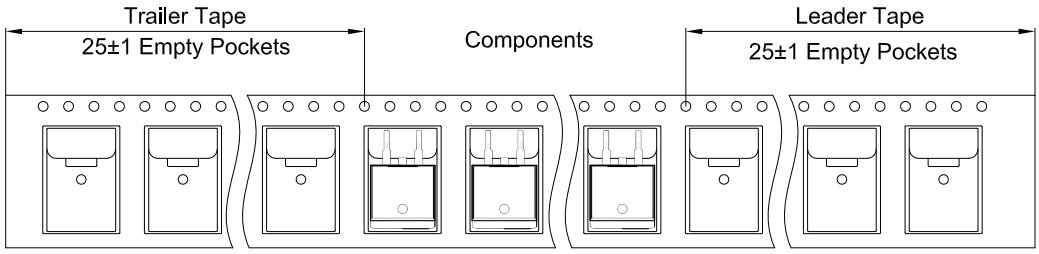
TO-263 Embossed Carrier Tapeape



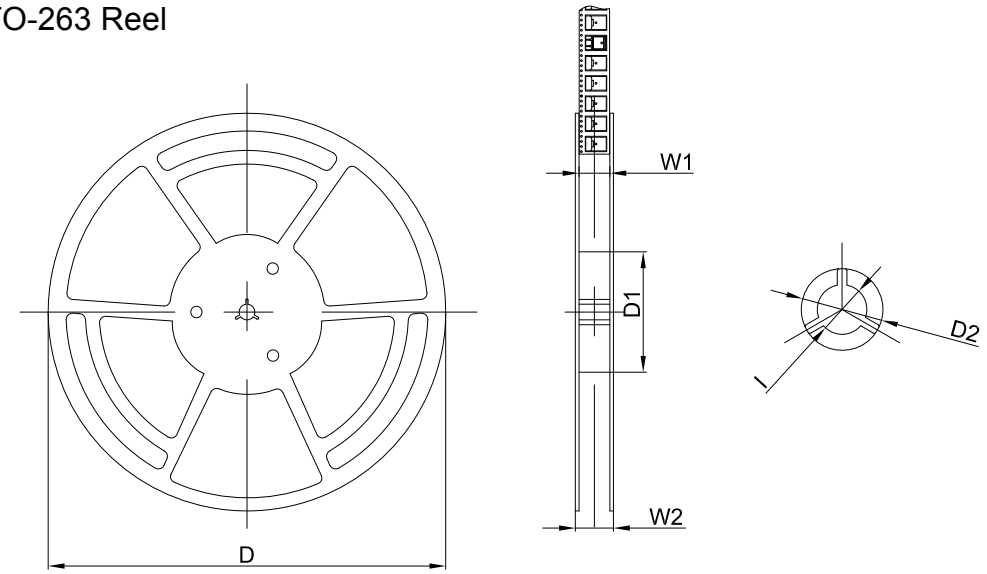
Packaging Description:
TO-263 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film,adhesive laye,sealant, and anti-static sprayed agent.These reeled parts In standard option are shipped with 800 units per 13" or 33.0cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
TO-263	10.80	16.13	5.21	Ø1.55	1.75	11.50	4.00	16.00	2.00	24.00

TO-263 Tape Leader and Trailer



TO-263 Reel



Dimensions are in millimeter						
Reel Option	D	D1	D2	W1	W2	I
13"Dia	Ø330.00	100.00	Ø21.00	24.4	30.4	Ø13.00

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
800 pcs	13 Inch	1,600 pcs	340×336×66	8,000 pcs	400×353×365	

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