

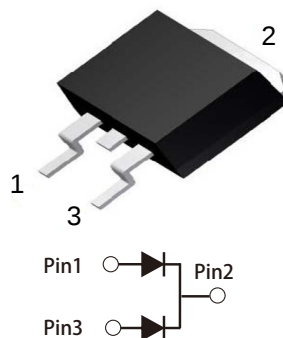


MBRS4040-MBRS40200 40A SCHOTTKY BARRIER RECTIFIER

TO-263

Features:

- ☐ Low power loss. high efficiency.
High surge capacity
- ☐ For use in low voltage, high frequency inverters,
free wheeling, and polarity protection applications.
- ☐ Metal silicon junction, majority carrier conduction.
- ☐ High current Capability. low forward voltage drop.
- ☐ Guard ring for over voltage protection.



1.Anode 2.Cathode 3. Anode

Absolute Maximum Ratings (Ta=25°C unless otherwise noted)

Parameter		Symbol	MBRS 4040	MBRS 4045	MBRS 4050	MBRS 4060	MBRS 4080	MBRS 4090	MBRS 40100	MBRS 40150	MBRS 40200	Unit
Maximum Recurrent Peak Reverse Voltage		V _{RRM}	40	45	50	60	80	90	100	150	200	V
Maximum RMS Voltage		V _{RMS}	28	31.5	35	42	56	63	70	105	140	
Maximum DC Blocking Voltage		V _{R(DC)}	40	45	50	60	80	90	100	150	200	
Maximum Average Forward Current		I _{F(AV)}	40									A
Peak Forward Surge Current:8.3ms single half sine-wave superimposed on rated load (JEDEC method)		I _{FSM}	350									
Maximum Forward Voltage at 20A per leg		V _F	0.65		0.72			0.82		0.92		V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T _j =25℃	I _R	0.1							0.05		mA
	T _j =125℃		20									
Maximum Operating Junction Temperature		T _j	175									℃
Storage Temperature		T _{stg}	-65~+175									
Typical Thermal Resistance		R _{θJC}	1.3									℃/W

Typical Characteristics

RATING AND CHARACTERISTIC CURVES

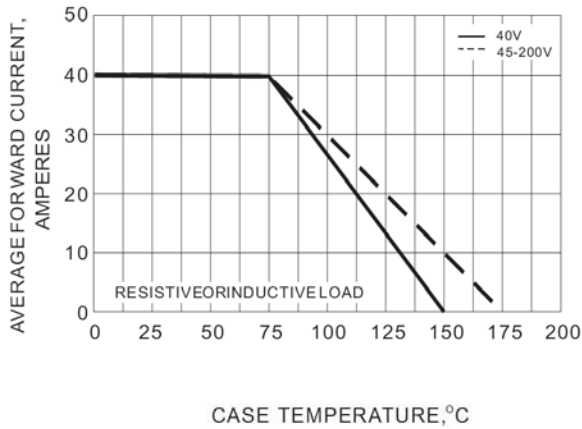


Fig.1 FORWARD CURRENT DERATING CURVE

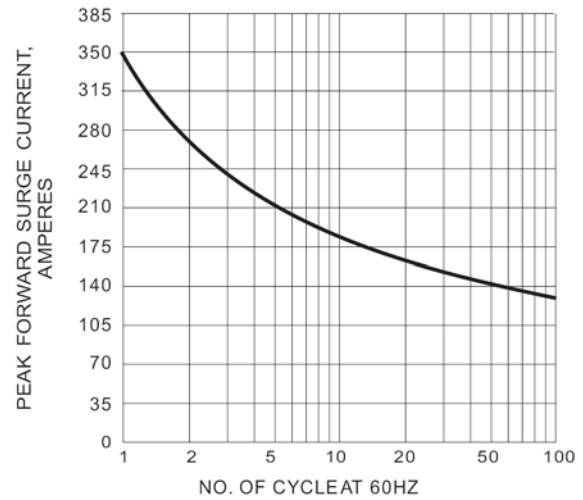


Fig.2 MAXIMUM NON-REPETITIVE SURGE CURRENT

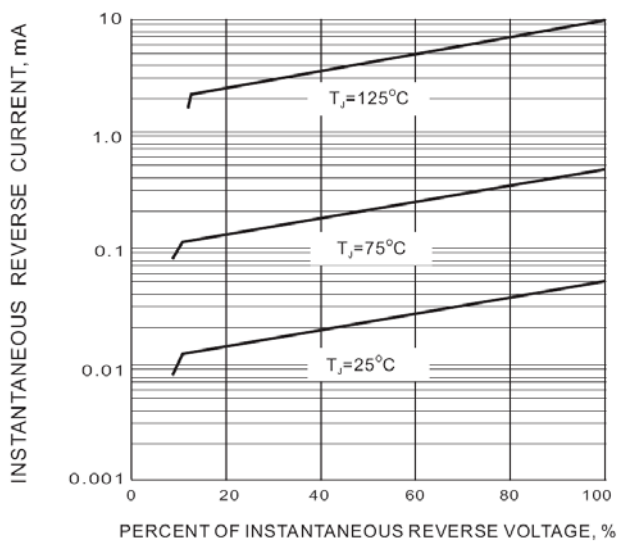


Fig 3. TYPICAL REVERSE CHARACTERISTIC

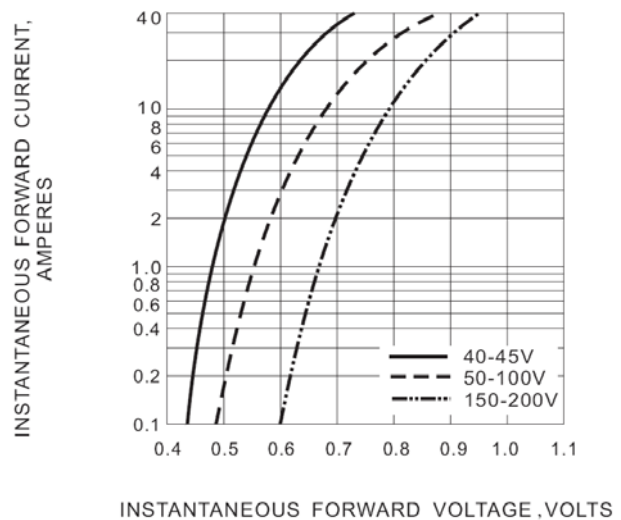
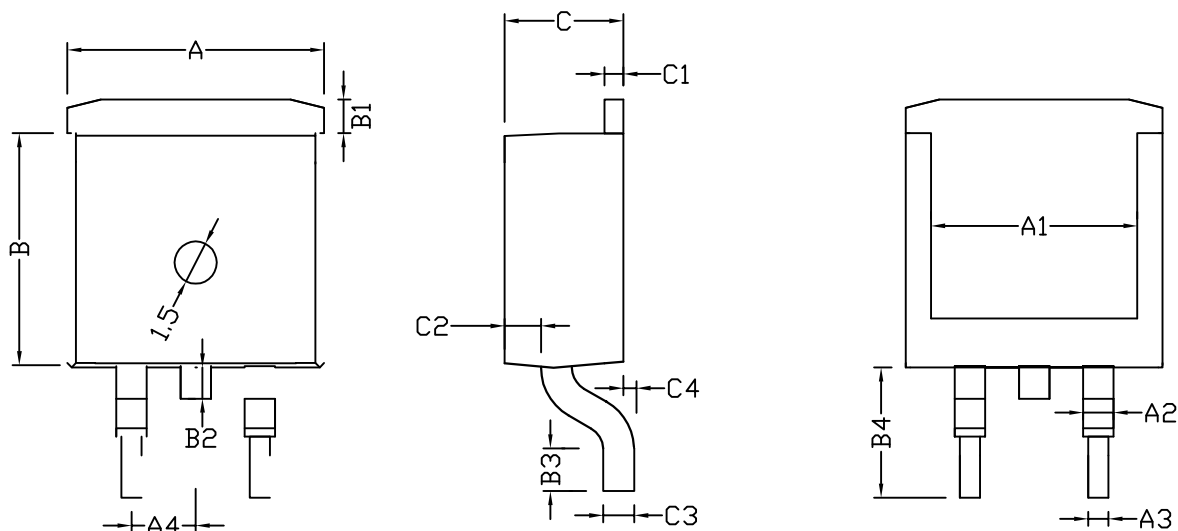


Fig 4. TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC

Package Dimension

TO-263



标注	最小	标准	最大	标注	最小	标准	最大	标注	最小	标准	最大
A	9.78	9.88	9.98	B	8.7	9.2	9.7	C	4.42	4.5	4.58
A1	7.02	7.16	7.3	B1	1.07	1.27	1.47	C1	1.27	1.3	1.33
A2	1.22	1.27	1.35	B2	1.4	1.55	1.7	C2	1.55	1.6	1.65
A3	0.77	0.8	0.83	B3	2.0	2.3	2.6	C3	0.48	0.5	0.52
A4	2.5	2.54	2.58	B4	5.03	5.13	5.23	C4	0.01	0.06	0.12