



SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

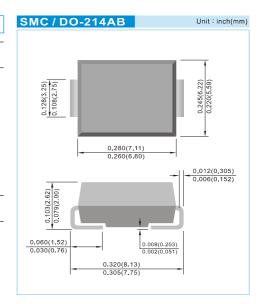
VOLTAGE 40 to 200 Volt **CURRENT** 5 Ampere

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- · For surface mounted applications in order to optimize board space
- Low power loss, high efficiency
- High surge capacity
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

MECHANICAL DATA

- Case: JEDEC DO-214AB molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Standard packaging: 16mm tape (EIA-481)
- Weight: 0.0082 ounces, 0.2325 grams
- · Marking : Part number



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified. Resistive or inductive load.

PARAMETER	SYMBOL	MB54	MB54A	MB55	MB56	MB58	MB59	MB510	MB515	MB520	UNITS
Maximum Recurrent Peak Reverse Voltage		40	45	50	60	80	90	100	150	200	٧
Maximum RMS Voltage	V _{RMS}	28	31.5	35	42	56	63	70	105	140	٧
Maximum DC Blocking Voltage	V _{DC}	40	45	50	60	80	90	100	150	200	٧
Average Rectified Output Current (See Figure 1)	I _{F(AV)}	5						Α			
Non-Repetitive Peak Forward Surge Current : 8.3ms single half sine-wave superimposed on rated load	I _{FSM}	100					Α				
Forward Voltage at 5A (Note 1)	V _F	0.7	0.74 0.8 0.		.9	٧					
Peak Reverse Current at Rated DC Blocking Voltage $T_{J}^{=25^{\circ}C}$ $T_{J}^{=100^{\circ}C}$	I _R	0.05 10					mA				
Typical Thermal Resistance (Note 2)	R _{eja} R _{ejl}	55 17				°C / W					
Operating Junction and Storage Temperature Range	T _J ,T _{STG}	-55 to +150 -65 to +175				°C					

NOTES:

- 1. Pulse Test with PW =300µsec, 1% Duty Cycle.
- 2. Mounted on P.C. Board with 14mm^2 (0.013mm thick) copper pad areas.





RATING AND CHARACTERISTIC CURVES

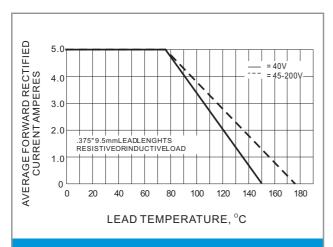


Fig.1 FORWARD CURRENT DERATING CURVE

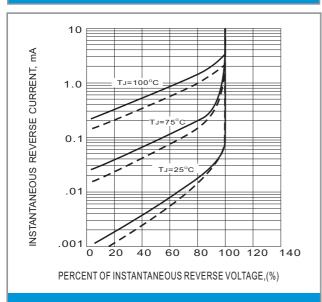


Fig.3 TYPICAL REVERSE CHARACTERISTIC

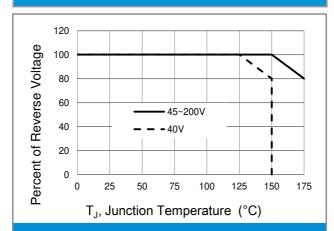


Fig.5 Operating Temperature Derating Curve

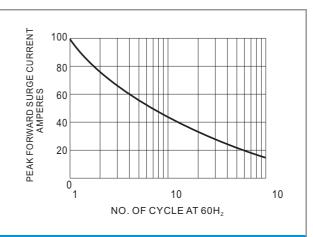


Fig.2 MAXIMUM NON-REPETITIVE SURGE CURRENT

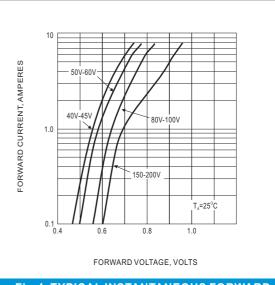
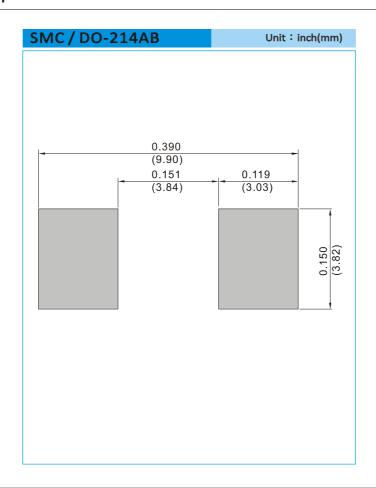


Fig.4 TYPICAL INSTANTANEOUS FORWARD CHARACTERISTIC





MOUNTING PAD LAYOUT



ORDER INFORMATION

Packing information

T/R - 3K per 13" plastic Reel

T/R - 0.8K per 7" plastic Reel

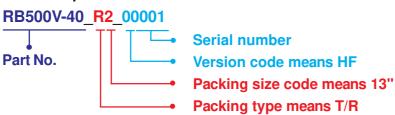




Part No packing code Version

MB54_R1_00001 MB54_R2_00001

For example:



Packing Code XX					Version Code XXXXX				
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1st Code	2 nd ~5 th Code			
Tape and Ammunition Box (T/B)	Α	N/A	0	HF	0	serial number			
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number			
Bulk Packing (B/P)	В	13"	2						
Tube Packing (T/P)	Т	26mm	X						
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y						
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U						
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D						





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