

MBRS140

SCHOTTKY POWER RECTIFIER

General Description:

Schottky Barrier Diodes make use of the rectification effect of a metal to silicon barrier. They are ideally suited for high frequency rectification in switching regulators & converters. This device offers a low forward voltage performance in a power surface mount package in applications where size and weight are critical.

Features:

- Compact surface mount package with J-bend leads (SMB).
- 1.5 Watt Power Dissipation package.
- 1.0 Ampere, forward voltage less than 600 mv

Ordering:

• 13 inch reel (330 mm); 12 mm Tape; 3,000 units per reel.

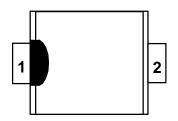
Absolute Maximum Ratings* TA = 25°C unless otherwise noted

Parameter	Value	Units
Storage Temperature	-65 to +150	°С
Maximum Junction Temperature	-65 to +125	оС
Repetitive Peak Reverse Voltage (V _{RRM})	40	V
Average Rectified Forward Current (T _L = 115 ^O C)	1.0	А
Average Rectified Forward Current (T _L = 100°C)	2.0	А
Surge Non Repetitive Forward Current	40	А
(Half wave, single phase, 60 Hz)		
Junction to Case for Thermal Resistance (R _{ØJL})	12	°C/W

^{*}These ratings are limiting values above which the serviceability of any semiconductor device may be impaired

SMB Package (DO-214AA)

Top Mark: B140

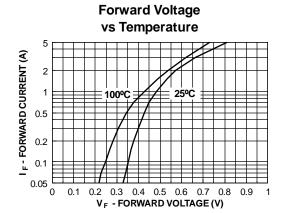


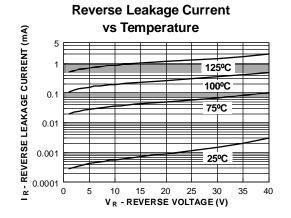
Electrical Characteristics

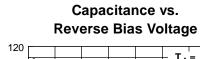
TA = 25°C unless otherwise noted

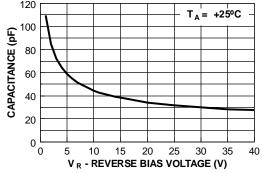
CON	DIT	ΓΙΟΙ	NS

SYM	CHARACTERISTICS	MIN	MAX	UNITS	TEST CONDITIONS
I _R	Reverse Leakage Current PW 300 us, ≤2% Duty Cycle		1.0 10	mA mA	$V_R = 40 \text{ V}; Tj = 25^{\circ}\text{C}$ $V_R = 40 \text{ V}; Tj = 100^{\circ}\text{C}$
V _F	Forward Voltage PW 300 us, ≤2% Duty Cycle		550	mV	$I_F = 1.0 \text{ A}; \text{ Tj} = 25^{\circ}\text{C}$







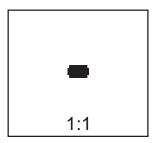


SMB/DO-214AA Package Dimensions



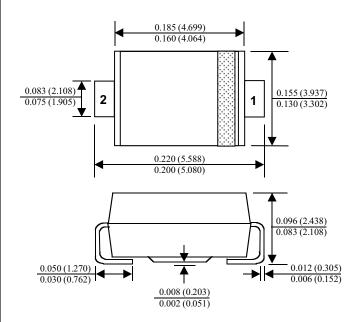
SMB/DO-214AA (FS PKG Code P6)

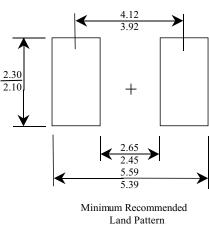




Scale 1:1 on letter size paper
Dimensions shown below are in:
inches [millimeters]

Part Weight per unit (gram): 0.093





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FAST[®] Quiet Series[™] SuperSOT[™]-3 GTO[™] SuperSOT[™]-6

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