

Schottky Barrier Rectifiers

Using the Schottky Barrier principle with a Refractory metal capable of high temperature operation metal. proprietary barrier technology allows for reliable operation up to 150°C junction temperature. Typical application are in switching Mode Power Supplies such as adaptors, DC/DC converters free-wheeling and polarity protection diodes.

Features

- *Low Forward Voltage.
- *Low Switching noise.
- *High Current Capacity
- *Guarantee Reverse Avalanche.
- *Guard-Ring for Stress Protection.
- *Low Power Loss & High efficiency.
- *150°C Operating Junction Temperature
- *Low Stored Charge Majority Carrier Conduction.
- *Plastic Material used Carries Underwriters Laboratory Flammability Classification 94V-O
- *Moisture Sensitivity Level: MSL-1



*In compliance with EU RoHs 2002/95/EC directives

SCHOTTKY BARRIER RECTIFIERS

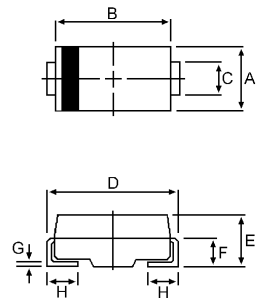
**2.0 AMPERES
200 VOLTS**



DO-214AA(SMB)

MAXIMUM RATINGS

Characteristic	Symbol	SR220	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	200	V
RMS Reverse Voltage	$V_{R(RMS)}$	140	V
Average Rectifier Forward Current	I_O	2.0	A
Non-Repetitive Peak Surge Current (Surge applied at rate load conditions halfware, single phase, 60Hz)	I_{FSM}	50	A
Operating and Storage Junction Temperature Range	T_J , T_{STG}	-65 to +150	°C



DIM	MILLIMETERS	
	MIN	MAX
A	3.30	3.90
B	4.20	4.60
C	1.80	2.20
D	5.10	5.60
E	1.90	2.50
F		1.30
G		0.22
H	0.95	1.35

ELECTRIAL CHARACTERISTICS

Characteristic	Symbol	SR220	Unit
Maximum Instantaneous Forward Voltage ($I_F = 2.0$ Amp.)	V_F	0.95	V
Maximum Instantaneous Reverse Current (Rated DC Voltage, $T_C = 25^\circ\text{C}$) (Rated DC Voltage, $T_C = 125^\circ\text{C}$)	I_R	0.01 10	mA
Maximum Thermal Resistance Junction to case	$R_{\theta JC}$	55	°C/W
Typical Junction Capacitance (Reverse Voltage of 4 volts & $f=1$ MHz)	C_P	80	pF

CASE---
Transfer molded plastic

POLARITY---
Cathode indicated polarity band

FIG-1 FORWARD CURRENT DERATING CURVE

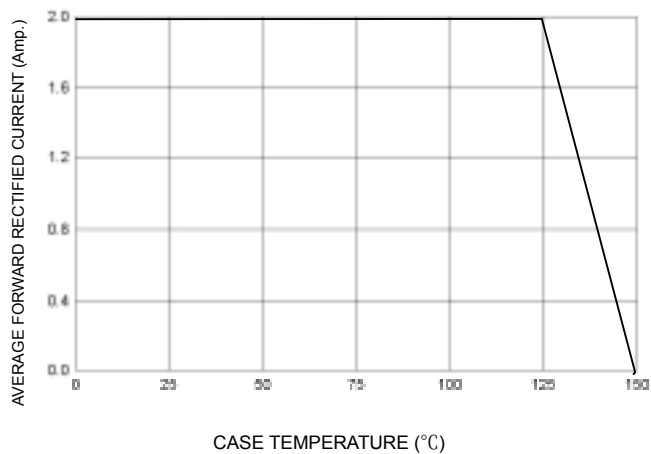


FIG-2 TYPICAL FORWARD CHARACTERISTICS

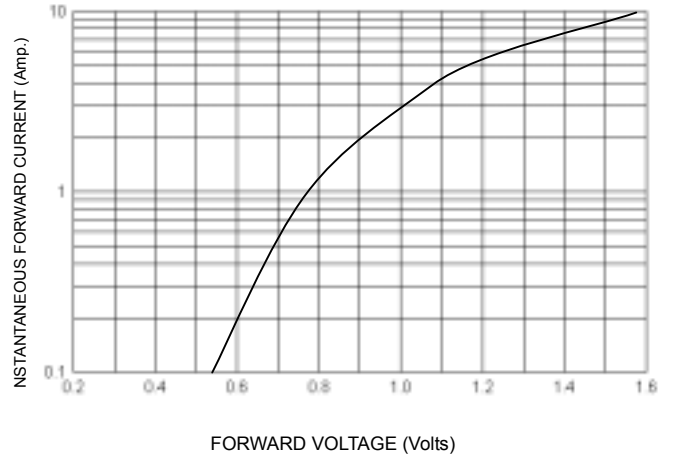


FIG-3 TYPICAL REVERSE CHARACTERISTICS

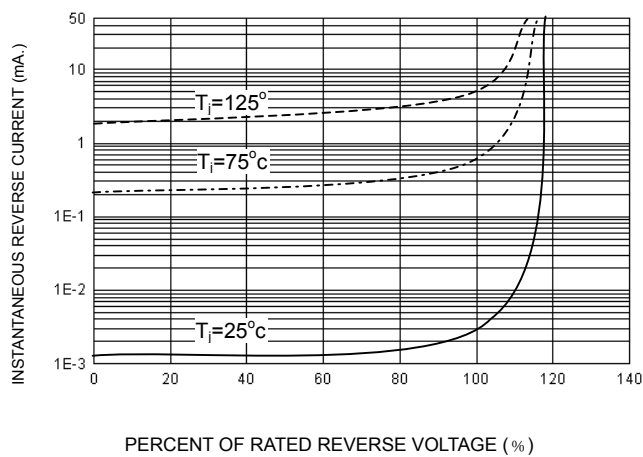


FIG-4 TYPICAL JUNCTION CAPACITANCE

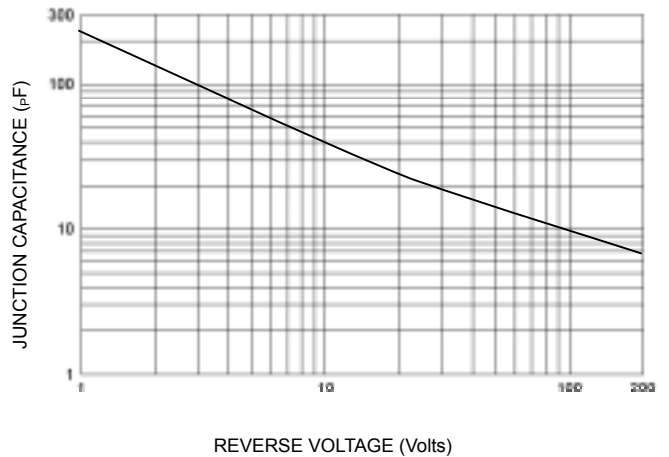


FIG-5 PEAK FORWARD SURGE CURRENT

