MOSPEC

SRT520

Schottky Barrier Rectifiers

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

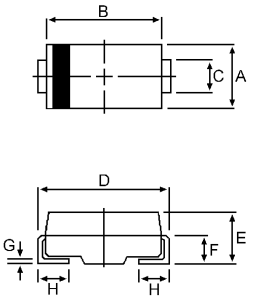
SCHOTTKY BARRIER RECTIFIERS

5 AMPERES
200 VOLTS

- ∗Low Forward Voltage.
- ∗Low Switching noise.
- ∗High Current Capacity
- ∗Guarantee Reverse Avalanche.
- ∗Guard-Ring for Stress Protection.
- ∗Low Power Loss & High efficiency.
- ∗150℃ 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*

DO-214AA(SMB)



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

CASE---
Transfer molded plastic

POLARITY---
Cathode indicated polarity band

MAXIMUM RATINGS

Characteristic	Symbol	SRT520	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	200	V
RMS Reverse Voltage	$VR_{(RMS)}$	140	V
Average Rectifier Forward Current	I_O	5.0	A
Non-Repetitive Peak Surge Current (Surge applied at rate load conditions half-wave, single phase,60Hz)	I_{FSM}	80	A
Operating and Storage Junction Temperature Range	T_J , T_{STG}	-65 to +150	℃

THERMAL RESISTANCES

Typical Thermal Resistance junction to case	$R_{\theta j\text{-}c}$	5.5	℃/w

ELECTRICAL CHARACTERISTICS

Characteristic	Symbol	SRT520			Unit
		Min	Typ	Max	
Maximum Instantaneous Forward Voltage (I_F =0.1 Amp T_C = 25℃) (I_F =5.0 Amp T_C = 25℃)	V_F	--- ---	0.5 0.85	--- 0.90	V
Maximum Instantaneous Reverse Current (Rated DC Voltage, T_C = 25℃) (Rated DC Voltage, T_C = 125℃)	I_R	--- ---	0.02 10	0.05 ---	mA

SRT520

FIG-1 FORWARD CURRENT DERATING CURVE

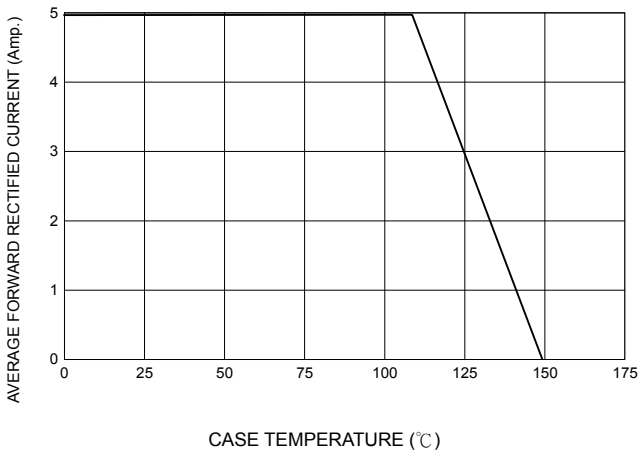


FIG-2 TYPICAL FORWARD CHARACTERISITICS

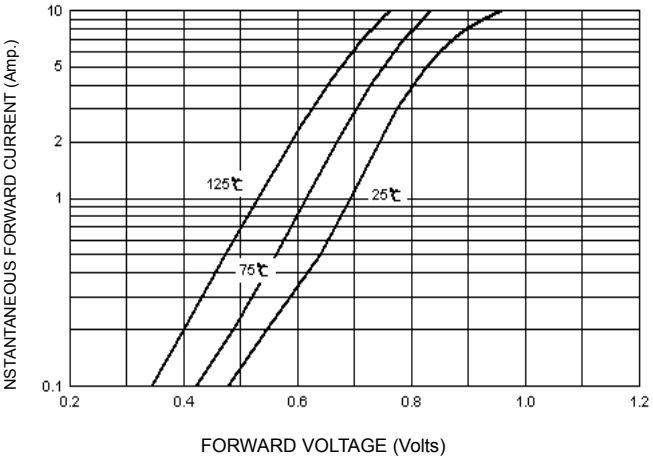


FIG-3 TYPICAL REVERSE CHARACTERISTICS

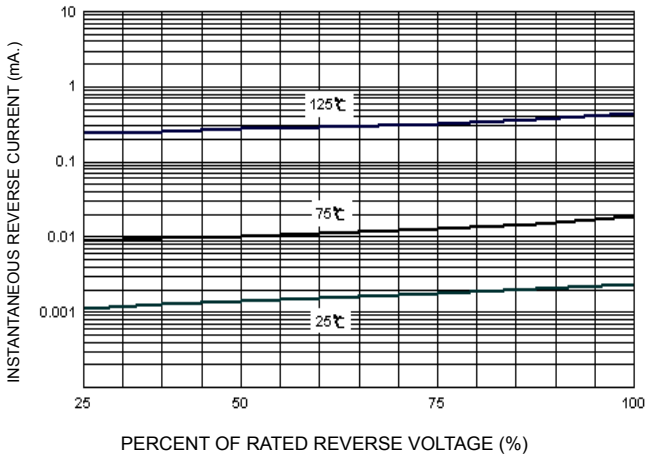


FIG-4 TYPICAL JUNCTION CAPACITANCE

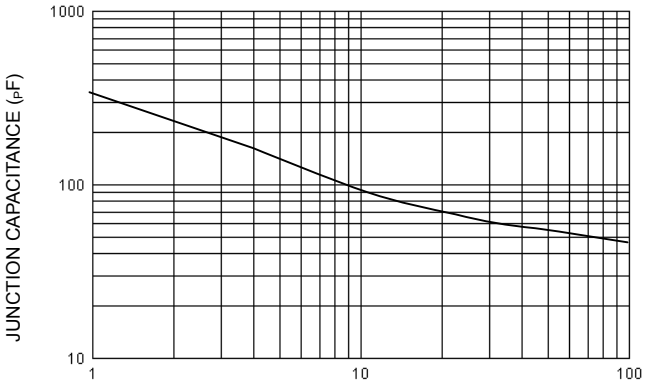
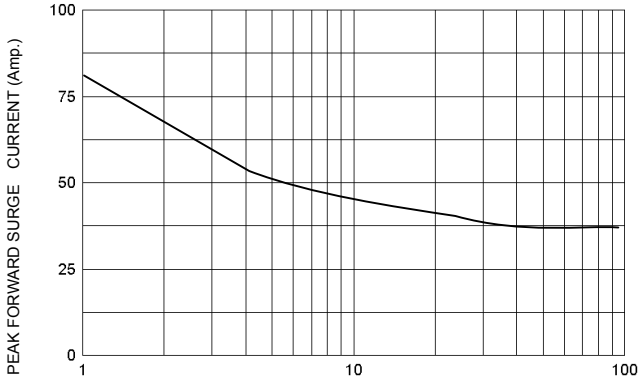


FIG-5 PEAK FORWARD SURGE CURRENT



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