MOSPEC

SRM24

Surface Mount
Schottky Barrier rectifiers

Using the Schottky Barrier principle with high temperature operation metal. The properitary barrier technology allows for reliable operation up to 150℃ junction temperature. Typical application are in switching Mode Power Supplies such as adaptators, Photovoltaic Solar cell protection,free-wheeling and polarity protection diodes.

SCHOTTKY BARRIER RECTIFIERS

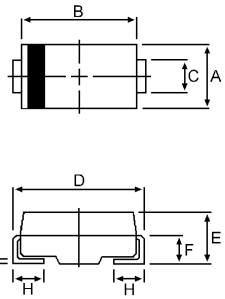
2 AMPERES
40VOLTS

Features

- ＊Ultra Low Forward Voltage.
- ＊Low Switching noise.
- ＊High Current Capacity
- ＊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

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

DO-214AA(SMB)



MAXIMUM RATINGS

Characteristic	Symbol	SRM24	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	40	V
RMS Reverse Voltage	$V_{R(RMS)}$	28	V
Average Rectifier Forward Current	$I_{F(AV)}$	2	A
Non-Repetitive Peak Surge Current (Surge applied at rate load conditions halfware, single phase, 60Hz)	I_{FSM}	30	A
Operating and Storage Junction Temperature Range	T_J , T_{stg}	-65 to +150	℃

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

THERMAL RESISTANCES

Typical Thermal Resistance junction to body	$R_{\theta j\text{-}c}$	6.5	℃/w

ELECTRICAL CHARACTERISTICS

Characteristic	Symbol	SRM24			Unit
		Min	Typ.	Max.	
Maximum Instantaneous Forward Voltage	V_F				V
(I_F =0.1 Amp T_C = 25℃)		---	0.29	0.31	
(I_F =2.0 Amp T_C = 25℃)		---	0.49	0.51	
Maximum Instantaneous Reverse Current	I_R				mA
(Rated DC Voltage, T_C = 25℃)			0.05		
(Rated DC Voltage, T_C = 125℃)			15		

CASE---
Transfer molded plastic

POLARITY---
Cathode indicated polarity band

SRM24

FIG-1 FORWARD CURRENT DERATING CURVE

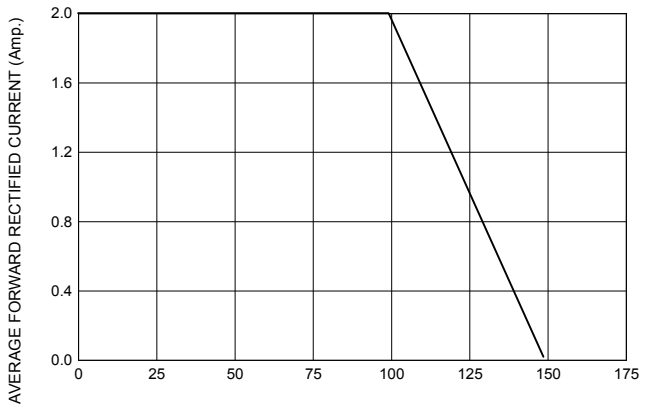


FIG-2 TYPICAL FORWARD CHARACTERISITICS

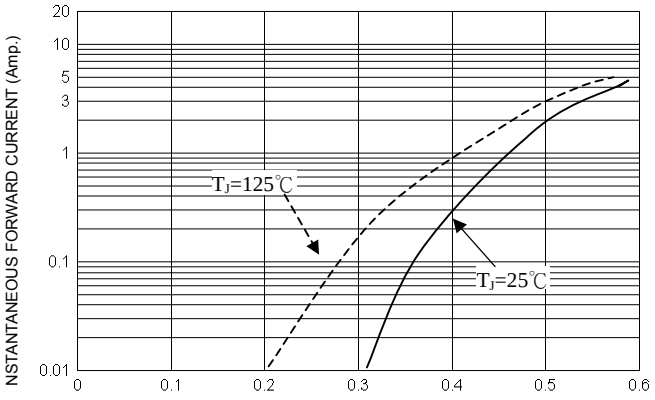


FIG-3 TYPICAL REVERSE CHARACTERISTICS

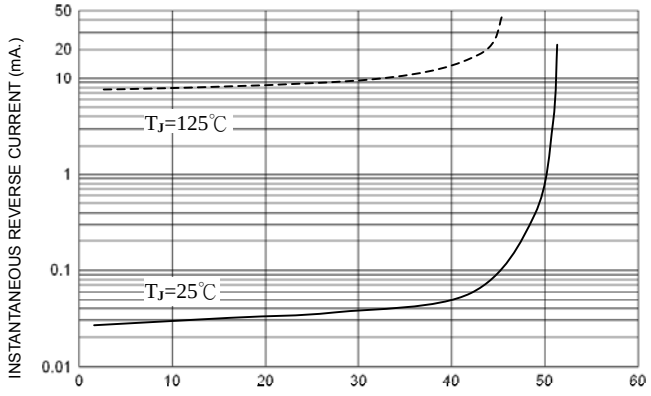


FIG-4 TYPICAL JUNCTION CAPACITANCE

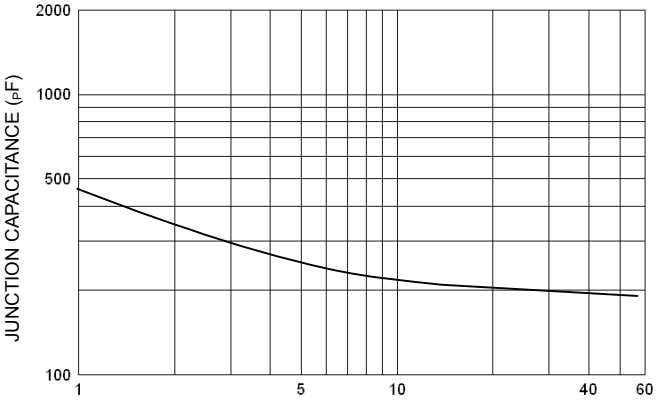
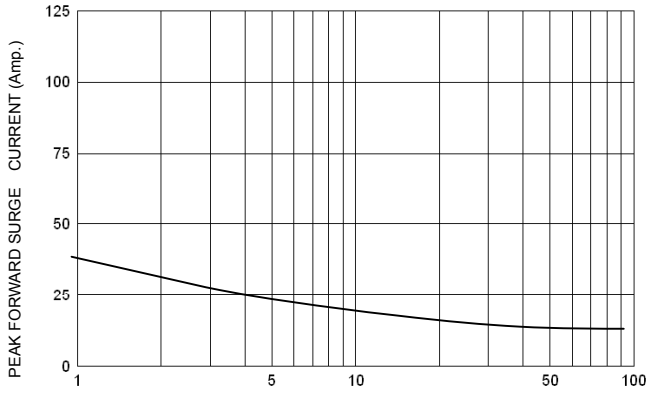


FIG-5 PEAK FORWARD SURGE CURRENT



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