MOSPEC

SR10060L

Schottky Barrier Rectifiers

Using the Schottky Barrier principle with a Refractory metal capable of 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, DC/DC convertes,free-wheeling and polarity protection diodes.

SCHOTTKY BARRIER RECTIFIERS

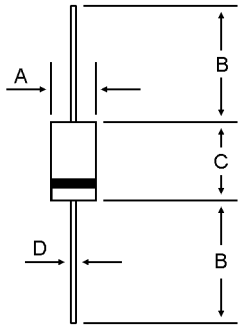
10 AMPERES
60 VOLTS

DO-201AD

Features

- ＊Super 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

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



DIM	MILLIMETERS	
	MIN	MAX
A	14.68	15.32
B	9.78	10.42
C	5.02	6.52
O	3.70	3.90

CASE---
Transfer molded plastic

POLARITY---
Cathode indicated polarity band

MAXIMUM RATINGS

Characteristic	Symbol	SR10060L	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	60	V
RMS Reverse Voltage	$V_{R(RMS)}$	42	V
Average Rectifier Forward Current	I_O	10	A
Non-Repetitive Peak Surge Current (Surge applied at rate load conditions halfware, single phase, 60Hz)	I_{FSM}	175	A
Operating and Storage Junction Temperature Range	T_J , T_{stg}	-65 to +150	℃

THERMAL RESISTANCES

Maximum Thermal Resistance junction to case	$R_{\theta j\text{-}c}$	40	℃/w

ELECTRICAL CHARACTERISTICS

Characteristic	Symbol	SR10060L			Unit
		Min	Typ.	Max.	
Maximum Instantaneous Forward Voltage	V_F				V
(I_F =0.1 Amp T_C = 25℃)		---	0.26	0.28	
(I_F =5.0 Amp T_C = 25℃)		---	0.44	0.49	
(I_F =10 Amp T_C = 25℃)		---	0.50	0.60	
Maximum Instantaneous Reverse Current	I_R				mA
(Rated DC Voltage, T_C = 25℃)		---	0.17	0.25	
(Rated DC Voltage, T_C = 100℃)		---	15	30	

SR10060L

FIG-1 FORWARD CURRENT DERATING CURVE

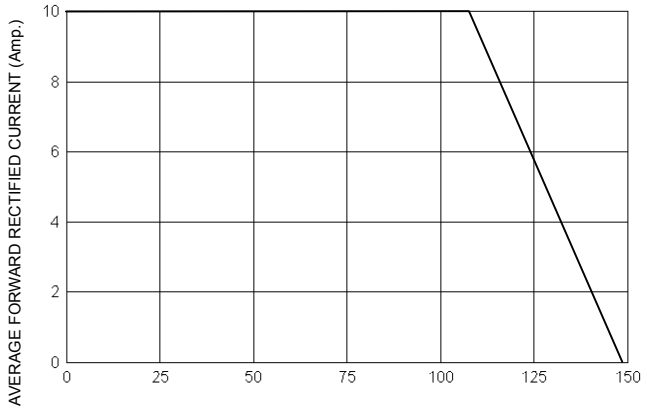


FIG-2 TYPICAL FORWARD CHARACTERISITICS

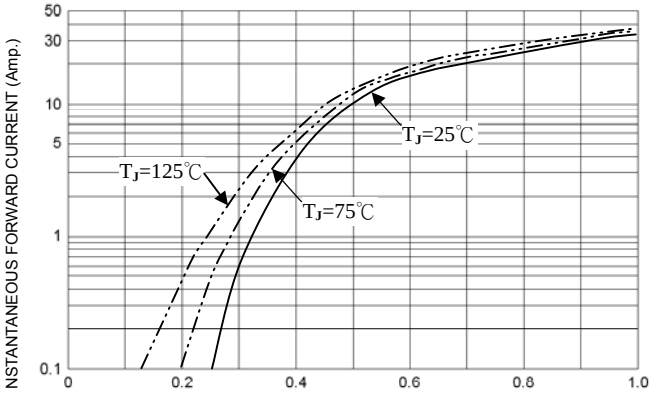


FIG-3 TYPICAL REVERSE CHARACTERISTICS

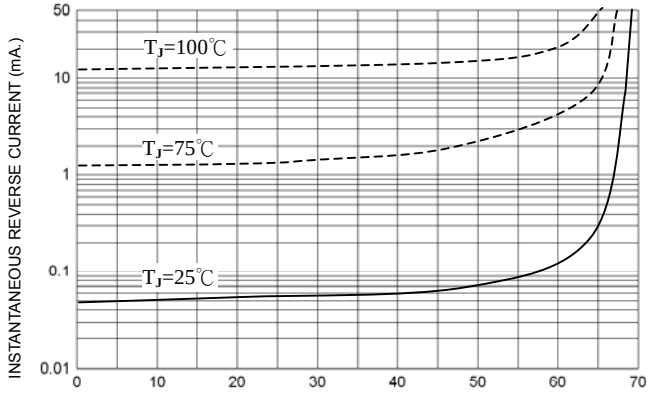


FIG-4 TYPICAL JUNCTION CAPACITANCE

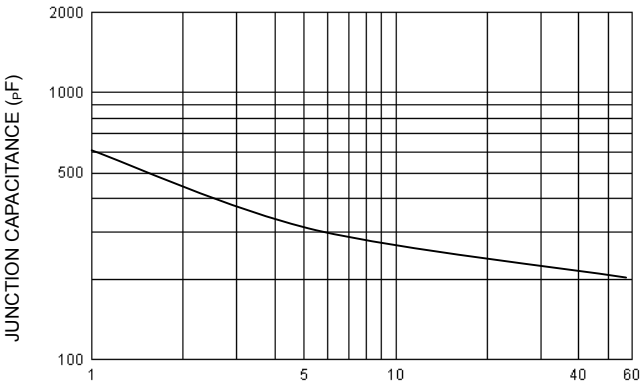


FIG-5 PEAK FORWARD SURGE CURRENT