

## 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°C junction temperature. Typical application are in switching Mode Power Supplies such as adaptators, DC/DC convertes, free-wheeling and polarity protection diodes.

### Features

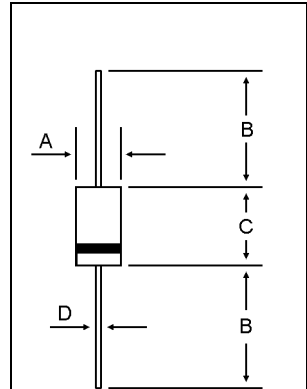
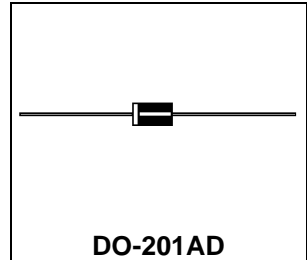
- \* Super Low Forward Voltage.
- \* Low Switching noise.
- \* High Current Capacity
- \* Guarantee Reverse Avalanche.
- \* Guard-Ring for Stress Protection.
- \* Low Power Loss & High efficiency.
- \* 150°C Operating Junction Temperature
- \* Low Stored Charge Majority Carrier Conduction.
- \* Plastic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



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

**SCHOTTKY BARRIER RECTIFIERS**

**10 AMPERES**  
**60 VOLTS**



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	°C

### THERMAL RESISTANCES

Maximum Thermal Resistance junction to case	$R_{\theta j-c}$	40	°C/w
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### ELECTRICAL CHARACTERISTICS

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

# SR10060L

FIG-1 FORWARD CURRENT DERATING CURVE

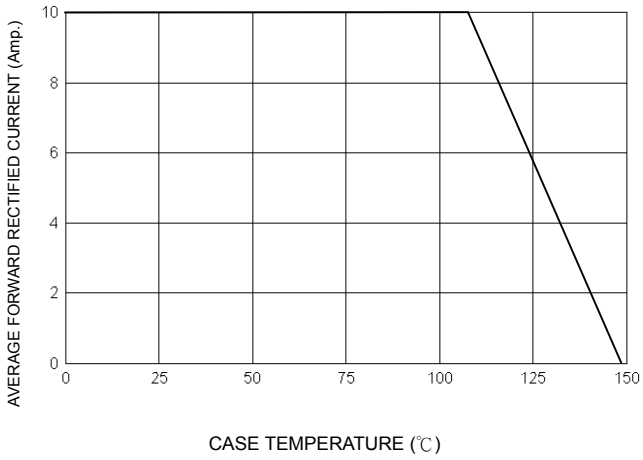


FIG-2 TYPICAL FORWARD CHARACTERISTICS

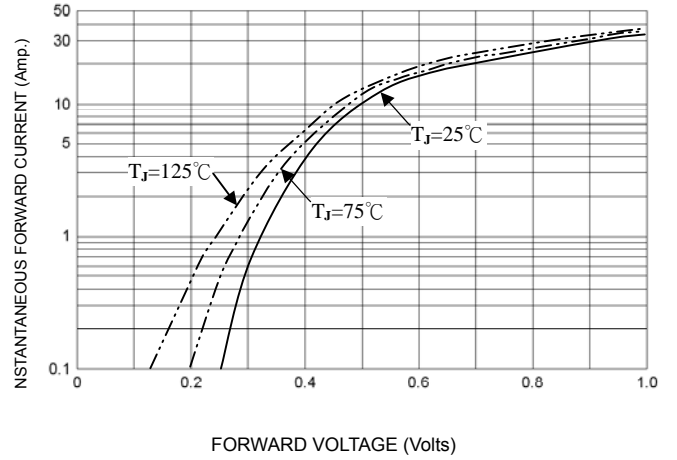


FIG-3 TYPICAL REVERSE CHARACTERISTICS

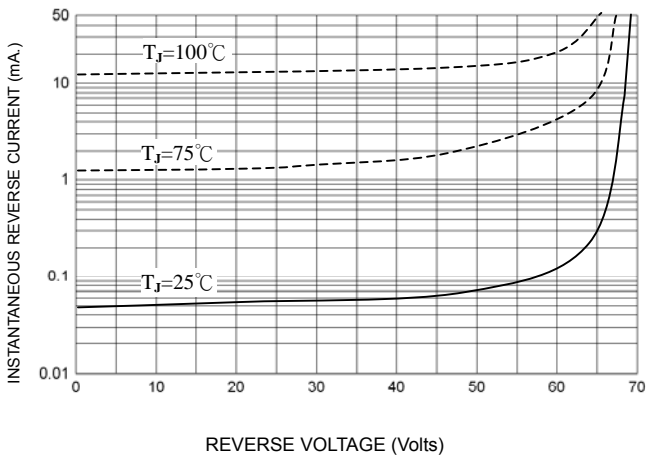


FIG-4 TYPICAL JUNCTION CAPACITANCE

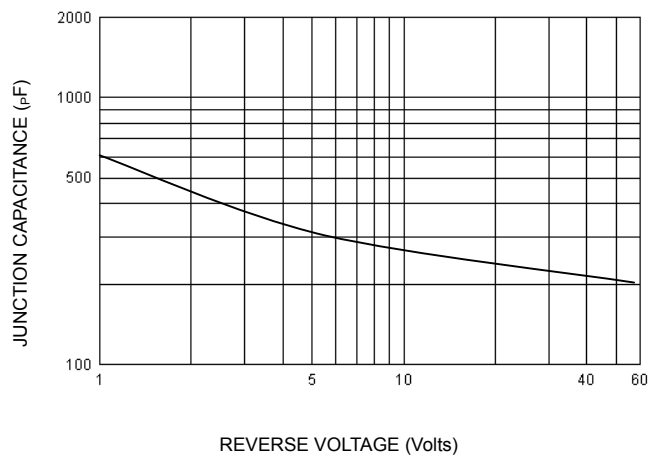
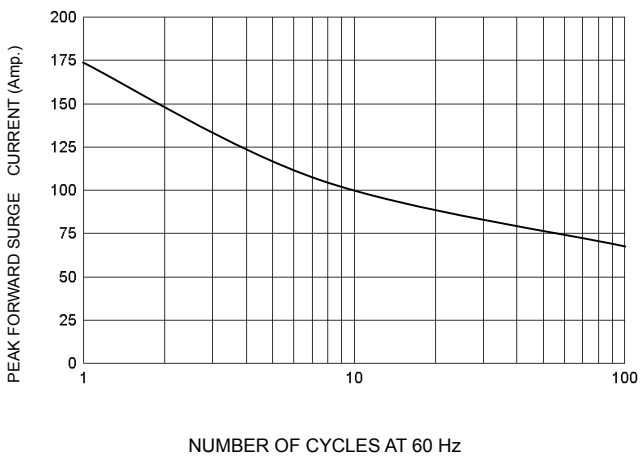


FIG-5 PEAK FORWARD SURGE CURRENT



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