

### Schottky Barrier Rectifiers

--- Using the Schottky Barrier principle with a Molybdenum barrier metal. These state-of-the-art geometry features epitaxial construction with oxide passivation and metal overlay contact. Ideally suited for low voltage, high frequency rectification, or as 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-0



\* *In compliance with EU RoHS 2002/95/EC directives*  
 The marking is indicated by part no. with. "M". ex:SR307M~SR3100M

#### MAXIMUM RATINGS

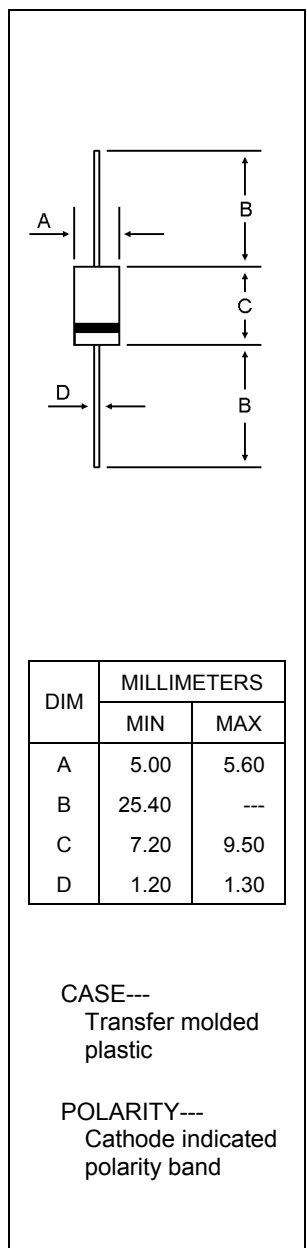
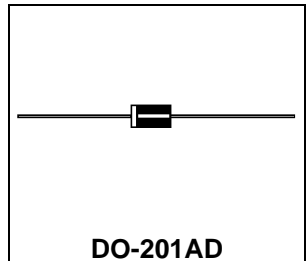
Characteristic	Symbol	SR				Unit
		307	308	309	3100	
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	$V_{RRM}$ $V_{RWM}$ $V_R$	70	80	90	100	V
RMS Reverse Voltage	$V_{R(RMS)}$	49	56	63	70	V
Average Rectifier Forward Current	$I_O$	3				A
Non-Repetitive Peak Surge Current (Surge applied at rate load conditions half-wave, single phase,60Hz )	$I_{FSM}$	75				A
Operating and Storage Junction Temperature Range	$T_J, T_{STG}$	-65 to +150				°C

#### ELECTRIAL CHARACTERISTICS

Characteristic	Symbol	SR				Unit
		307	308	309	3100	
Maximum Instantaneous Forward Voltage ( $I_F = 3.0$ Amp)	$V_F$	0.75		0.85		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	$R_{\theta JC}$	40				°C/W
Typical Junction Capacitance (Reverse Voltage of 4 volts & $f=1$ MHz)	$C_P$	180		150		pF

#### SCHOTTKY BARRIER RECTIFIERS

**3.0 AMPERES  
70-100 VOLTS**



# SR307 thru SR3100

FIG-1 FORWARD CURRENT DERATING CURVE

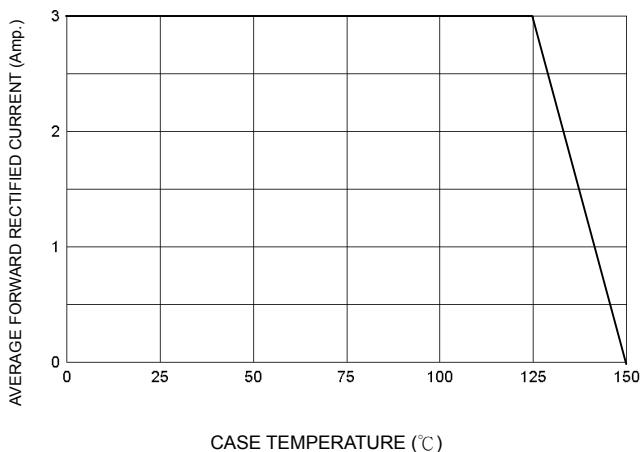


FIG-2 TYPICAL FORWARD CHARACTERISTICS

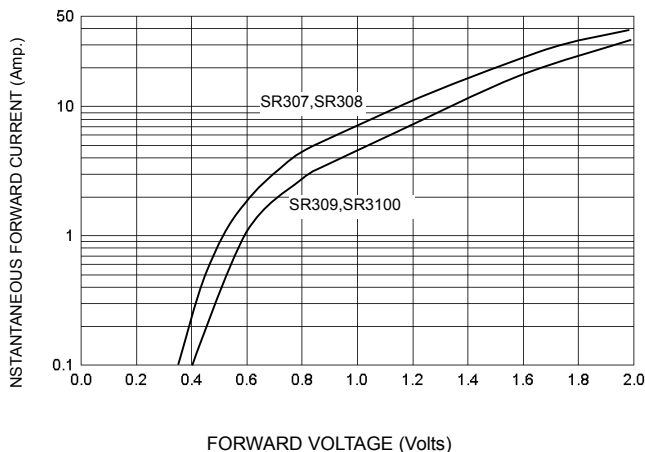


FIG-3 TYPICAL REVERSE CHARACTERISTICS

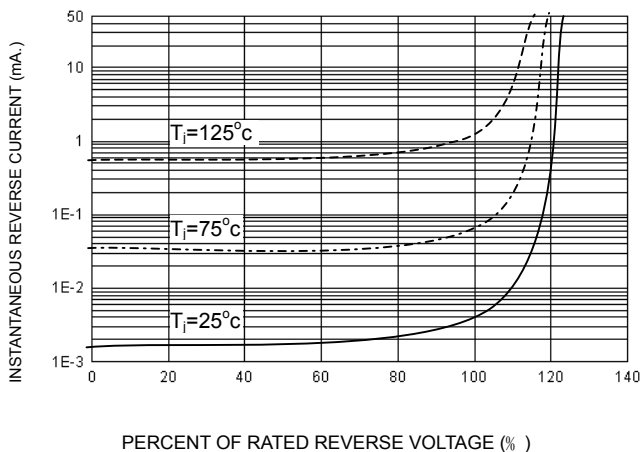


FIG-4 TYPICAL JUNCTION CAPACITANCE

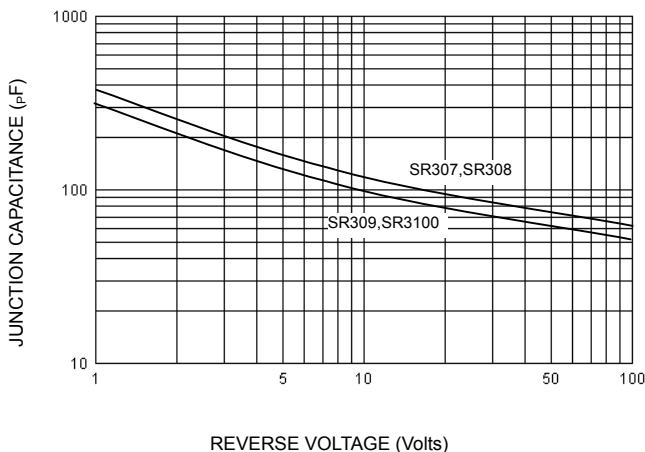
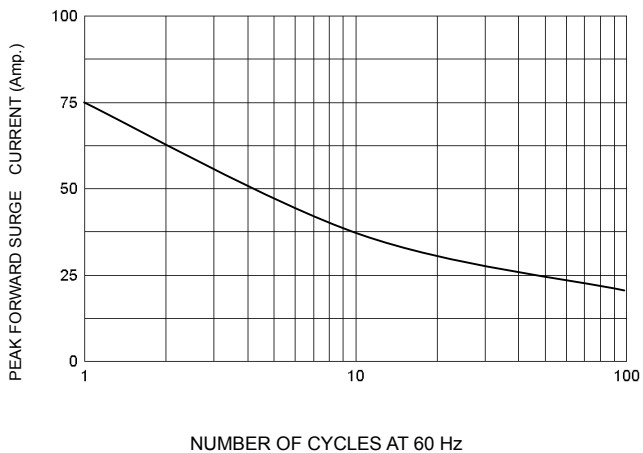


FIG-5 PEAK FORWARD SURGE CURRENT



## X-ON Electronics

Largest Supplier of Electrical and Electronic Components

*Click to view similar products for [Schottky Diodes & Rectifiers](#) category:*

*Click to view products by [Mospec](#) manufacturer:*

Other Similar products are found below :

[MA4E2039](#) [MA4E2508M-1112](#) [MBR10100CT-BP](#) [MBR1545CT](#) [MMBD301M3T5G](#) [GS1JE-TP](#) [RB160M-50TR](#) [BAS 3010S-02LRH E6327](#)  
[BAT 54-02LRH E6327](#) [NSR05F40QNXT5G](#) [NSVR05F40NXT5G](#) [NTE555](#) [JANS1N6640](#) [SB07-03C-TB-H](#) [SB1003M3-TL-W](#)  
[SBAT54CWT1G](#) [SBM30-03-TR-E](#) [SK310-T](#) [SK33A-TP](#) [SK34B-TP](#) [SS3003CH-TL-E](#) [PDS3100Q-7](#) [GA01SHT18](#) [CRS10I30A\(TE85L,QM](#)  
[MA4E2501L-1290](#) [MBRB30H30CT-1G](#) [BAS 70-02L E6327](#) [DMJ3940-000](#) [SB007-03C-TB-E](#) [SB10015M-TL-E](#) [SB1003M3-TL-E](#) [SK32A-](#)  
[TP](#) [SK33B-TP](#) [SK35A-TP](#) [SK38B-LTP](#) [SK38B-TP](#) [NRVBM120LT1G](#) [NTE505](#) [NTSB30U100CT-1G](#) [VS-6CWQ10FNHM3](#)  
[CRG04\(T5L,TEMQ\)](#) [ACDBA1100LR-HF](#) [ACDBA1200-HF](#) [ACDBA140-HF](#) [ACDBA2100-HF](#) [ACDBA240-HF](#) [ACDBA3100-HF](#)  
[CDBQC0530L-HF](#) [BAT54-13-F](#) [ACDBA340-HF](#)