MOSPEC

S08A30 Thru S08A60

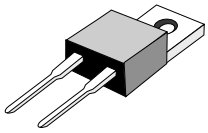
Schottky Barrier Rectifiers

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.

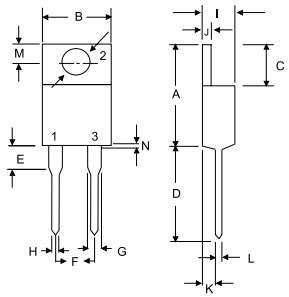
* Low Forward Voltag.
* Low Switching noise.
* High Current Capacity
* Guarantee Reverse Avalance.
* Guard-Ring for Stress Protection.
* Low Power Loss & High efficiency.
* 125 °C Operating Junction Temperature
* Low Stored Charge Majority Carrier Cnduction.
* Plastic Material used Carries Underwriters Laboratory Flammability Classification 94V-O

SCHOTTKY BARRIER RECTIFIERS

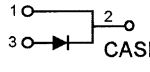
8 AMPERES
30 -- 60 VOLTS



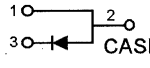
TO-220A



DIM	MILLMETERS	
	MIN	MAX
A	14.68	15.32
B	9.78	10.42
C	6.01	6.52
D	13.06	14.62
E	3.57	4.07
F	4.83	5.33
G	1.12	1.36
H	0.72	0.96
I	4.22	4.98
J	1.14	1.36
K	2.20	2.97
L	0.33	0.55
M	2.48	2.98
N	--	1.00
O	3.70	3.90



Case Positive
CASE Suffix "P"



Case Negative
CASE Suffix "R"

MAXIMUM RATINGS

Characteristic	Symbol	S08A						Unit
		30	35	40	45	50	60	
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	70	35	40	45	50	60	V
RMS Reverse Voltage	$V_{R(RMS)}$	21	24	28	31	35	42	V
Average Rectifier Forward Current	$I_{F(AV)}$	8.0						A
Peak Repetitive Forward Current (Rate V_R, Square Wave, 20kHz)	I_{FRM}	16						A
Non-Repetitive Peak Surge Current (Surge applied at rate load conditions halfware, single phase, 60Hz)	I_{FSM}	150						A
Operating and Storage Junction Temperature Range	T_j , T_{stg}	- 65 to + 125						°C

ELECTRICAL CHARACTERISTICS

Characteristic	Symbol	S08A						Unit
		30	35	40	45	50	60	
Maximum Instantaneous Forward Voltage (I_F=8.0 Amp, T_C = 25 °C) (I_F=8.0 Amp, T_C = 100 °C)	V_F	0.55 0.48				0.65 0.57		V
Maximum Instantaneous Reverse Current (Rated DC Voltage, T_C = 25 °C) (Rated DC Voltage, T_C = 100 °C)	I_R	5.0 50						mA

S08A30 thru S08A45

FIG-1 FORWARD CURRENT DERATING CURVE

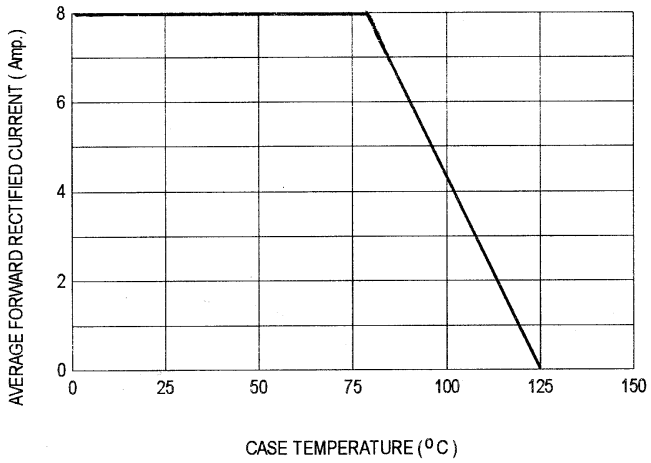


FIG-2 TYPICAL FORWARD CHARACTERISTICS

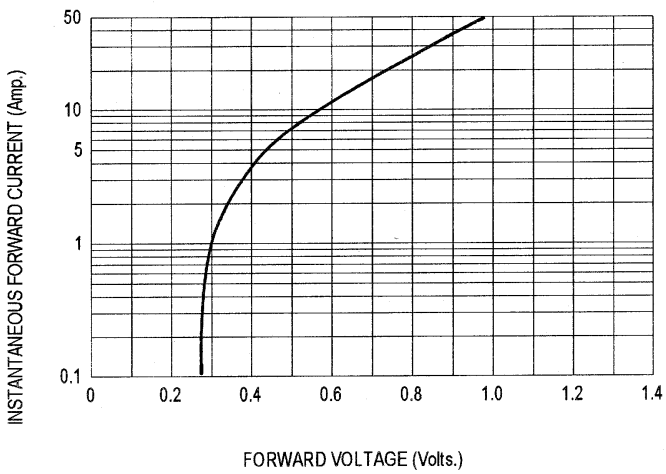


FIG-3 TYPICAL REVERSE CHARACTERISTICS

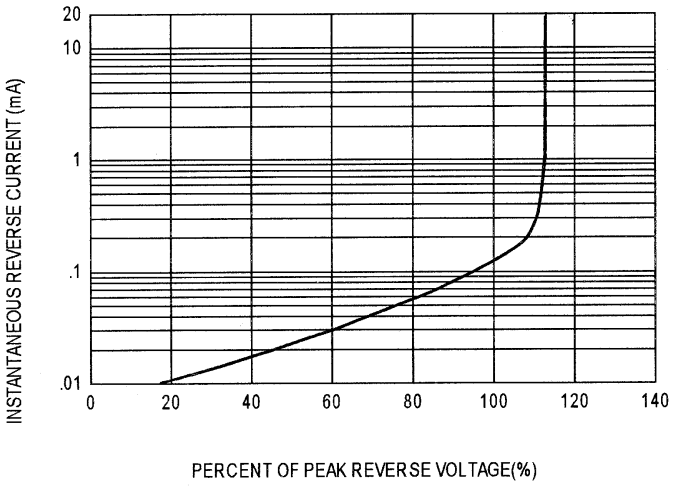


FIG-4 TYPICAL JUNCTION CAPACITANCE

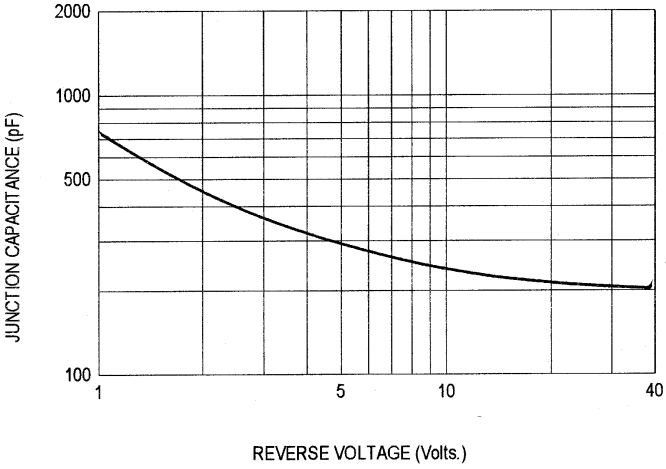
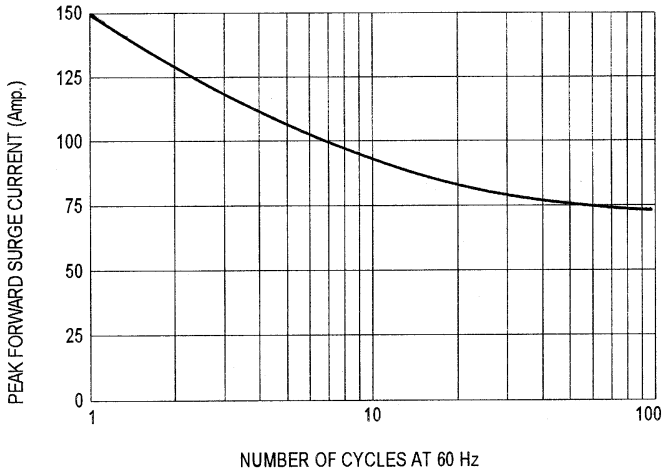


FIG-5 PEAK FORWARD SURGE CURRENT



S08A50 , S08A60

FIG-1 FORWARD CURRENT DERATING CURVE

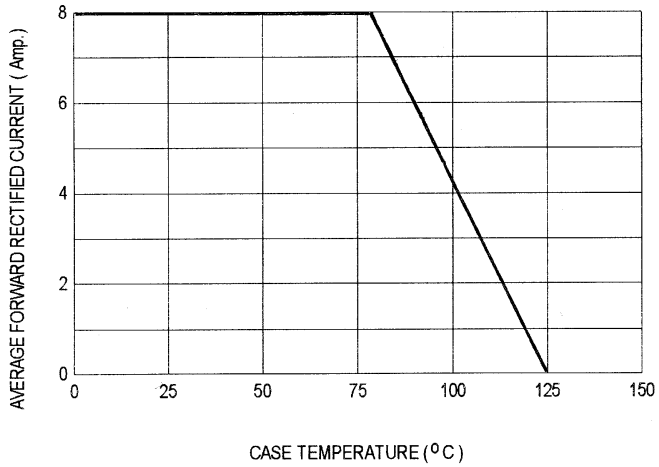


FIG-2 TYPICAL FORWARD CHARACTERISTICS

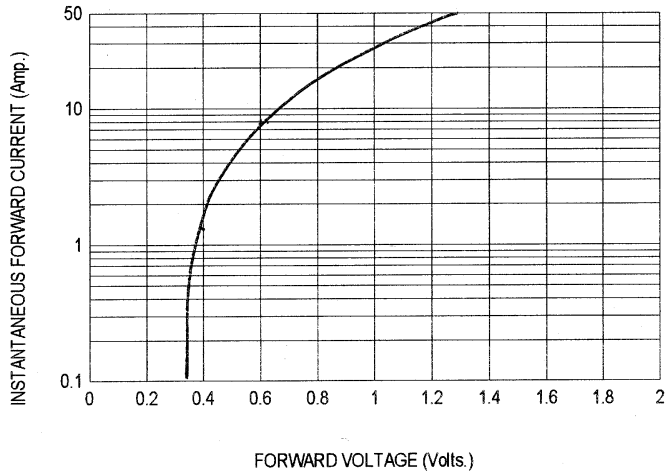


FIG-3 TYPICAL REVERSE CHARACTERISTICS

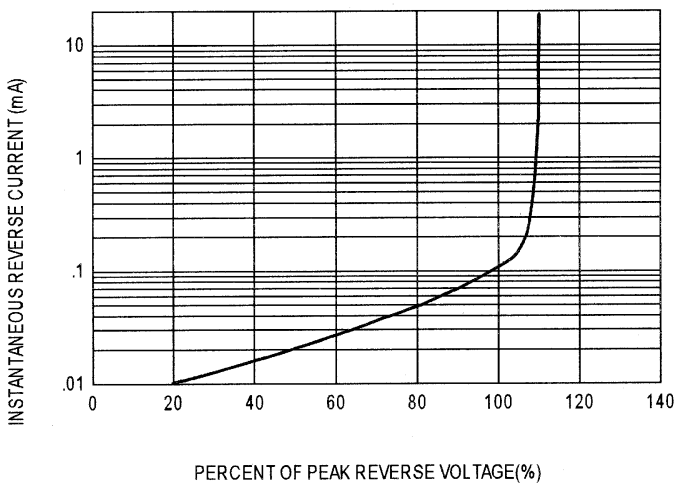


FIG-4 TYPICAL JUNCTION CAPACITANCE

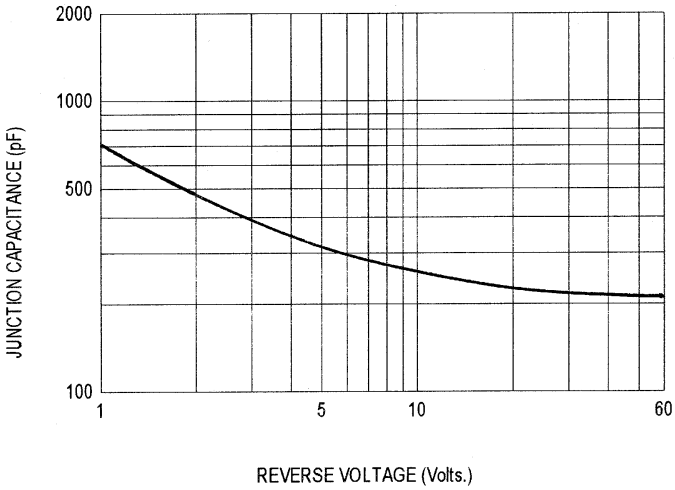


FIG-5 PEAK FORWARD SURGE CURRENT

