

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

SCHOTTKY BARRIER RECTIFIERS

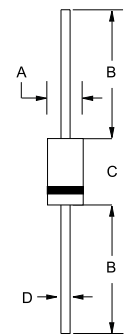
**5.0 AMPERES
20-60 VOLTS**



DO-201AD

MAXIMUM RATINGS

Characteristic	Symbol	SR					Unit
		502	503	504	505	506	
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	20	30	40	50	60	V
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	35	42	V
Average Rectifier Forward Current	I_O	5.0					A
Non-Repetitive Peak Surge Current (Surge applied at rated load conditions halfwave, single phase, 60Hz)	I_{FSM}	150					A
Operating and Storage Junction Temperature Range	T_J, T_{stg}	- 65 to + 125					°C



DIM	MILLIMETERS	
	MIN	MAX
A	5.00	5.60
B	25.40	—
C	8.50	9.50
D	1.20	1.30

ELECTRICAL CHARACTERISTICS

Characteristic	Symbol	SR					Unit
		502	503	504	505	506	
Maximum Instantaneous Forward Voltage (I _F = 5 Amp) (I _F = 15 Amp)	V _F	0.550 0.850			0.650 0.950		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
Typical Junction Capacitance (Reverse Voltage of 4 volts & f=1 MHz)	C _P	340			320		pF

CASE—
Transfer molded plastic

POLARITY—
Cathode indicated polarity band

SR502 thru SR504

FIG-1 FORWARD CURRENT DERATING CURVE

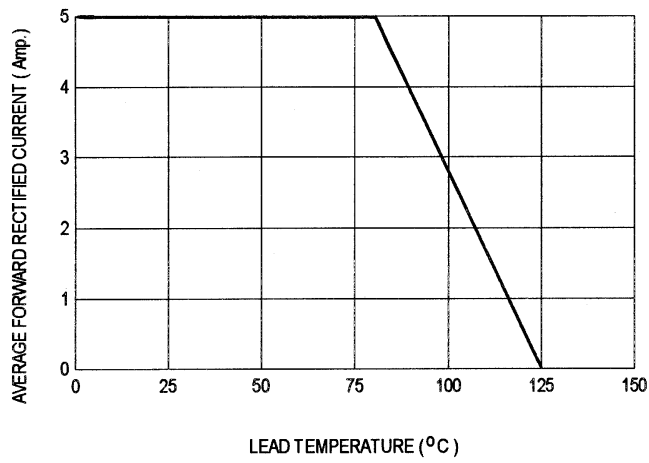


FIG-2 TYPICAL FORWARD CHARACTERISTICS

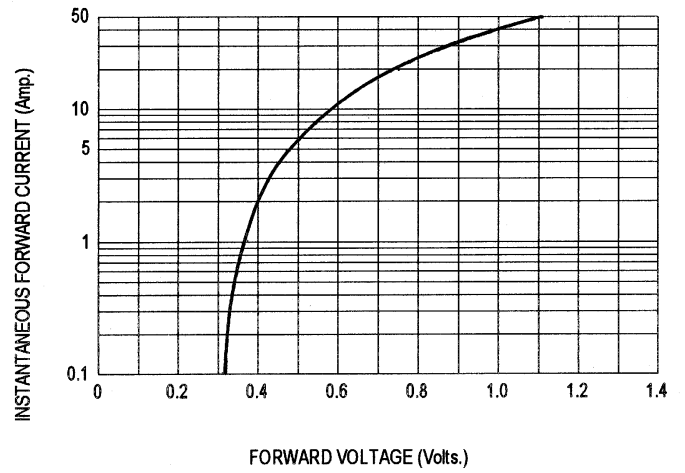


FIG-3 TYPICAL REVERSE CHARACTERISTICS

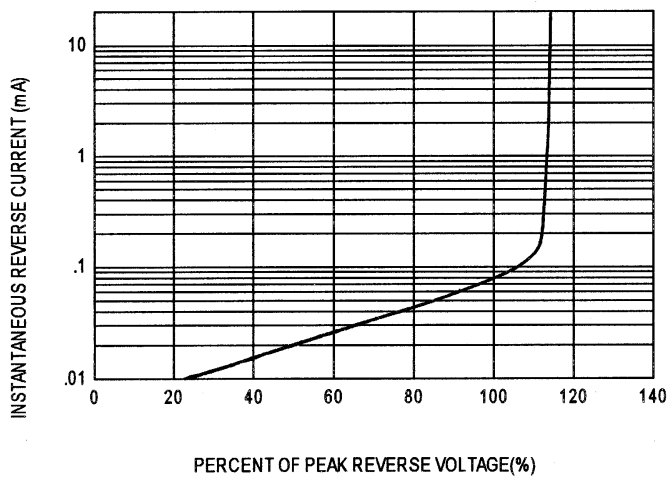


FIG-4 TYPICAL JUNCTION CAPACITANCE

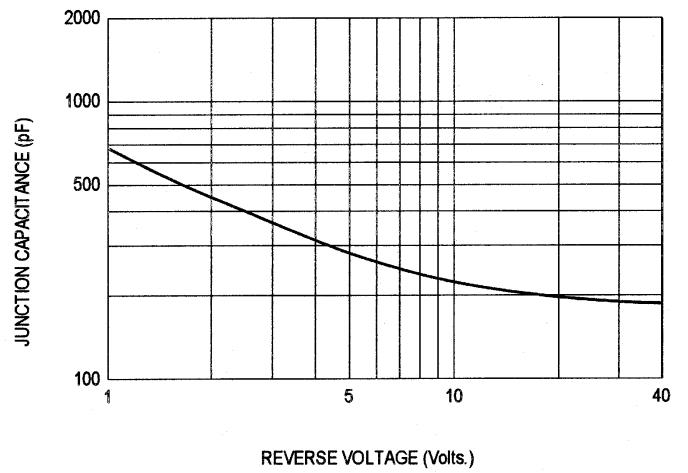
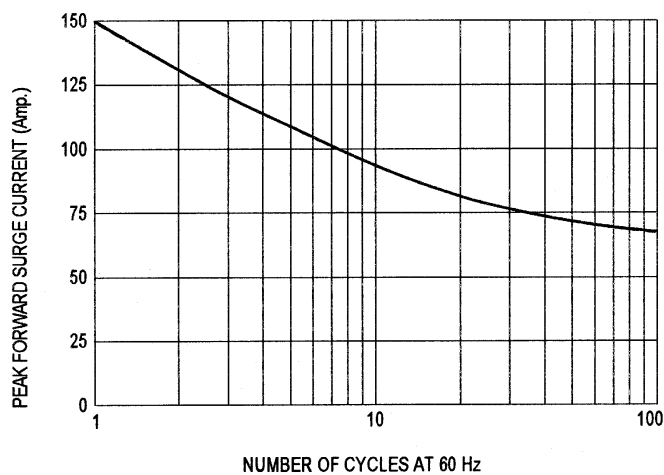


FIG-5 PEAK FORWARD SURGE CURRENT



SR505 , SR506

FIG-1 FORWARD CURRENT DERATING CURVE

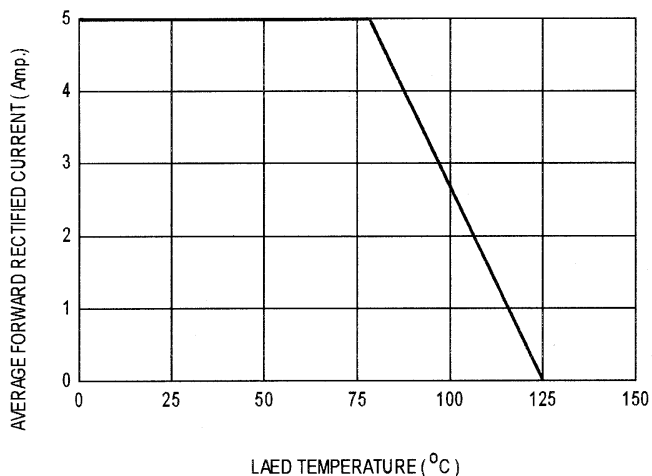


FIG-2 TYPICAL FORWARD CHARACTERISTICS

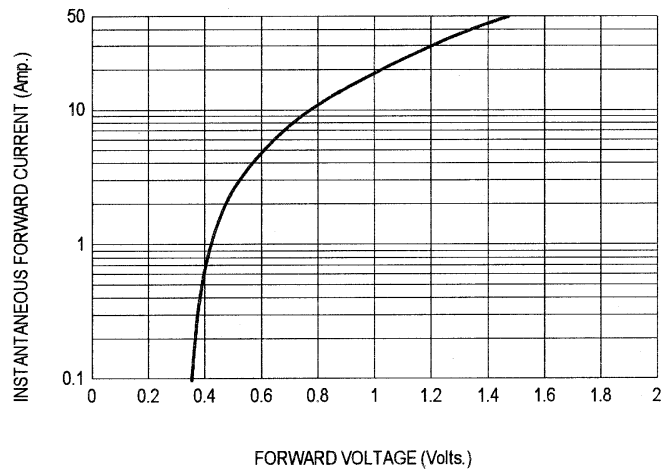


FIG-3 TYPICAL REVERSE CHARACTERISTICS

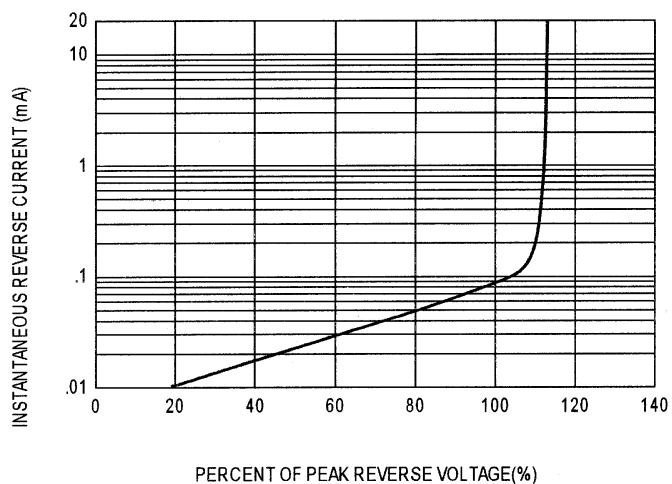


FIG-4 TYPICAL JUNCTION CAPACITANCE

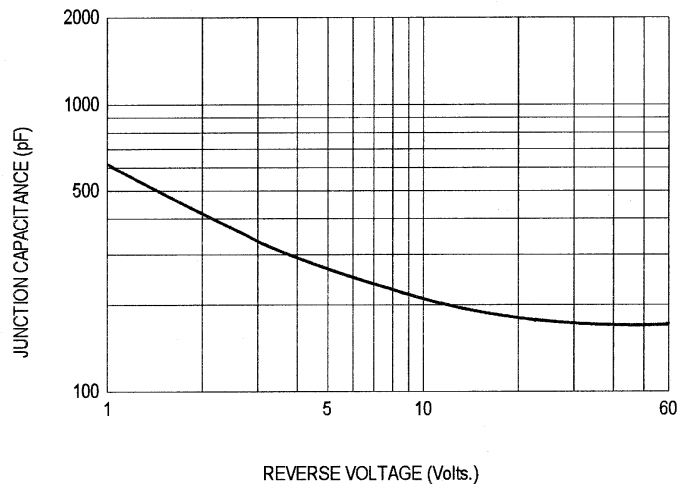


FIG-5 PEAK FORWARD SURGE CURRENT

