

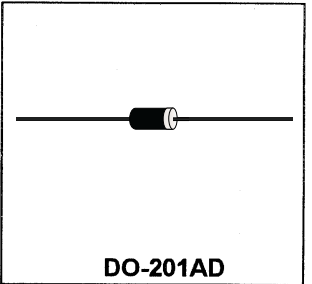
### Schottky Barrier Rectifiers

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

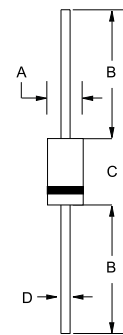
**5.0 AMPERES  
20-60 VOLTS**



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 rate 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

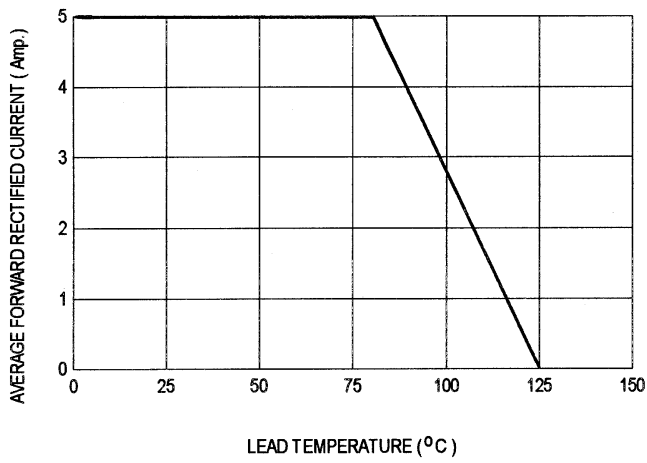


FIG-2 TYPICAL FORWARD CHARACTERISTICS

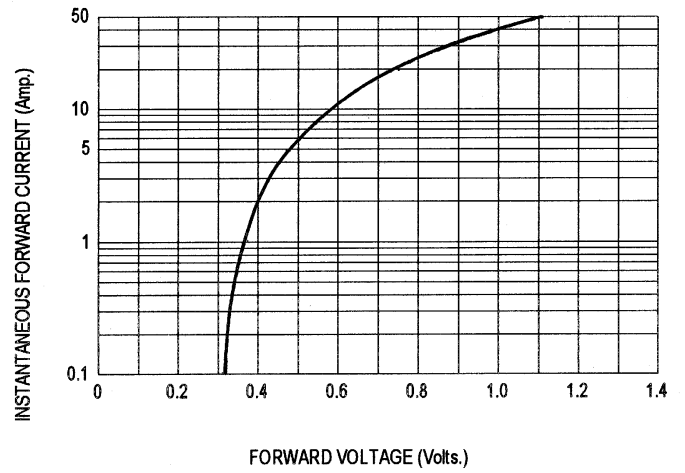


FIG-3 TYPICAL REVERSE CHARACTERISTICS

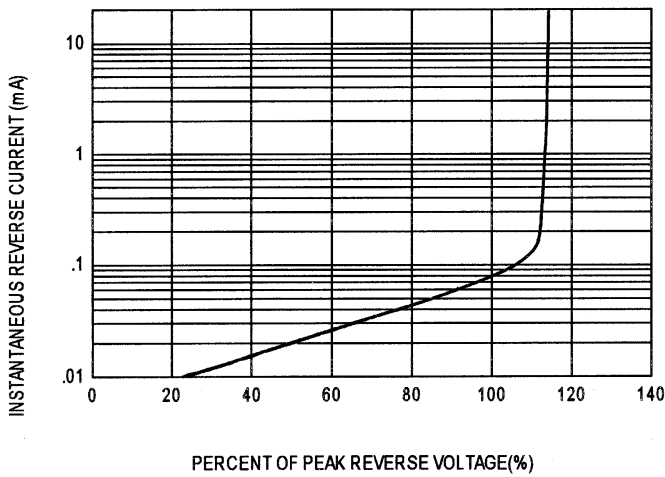


FIG-4 TYPICAL JUNCTION CAPACITANCE

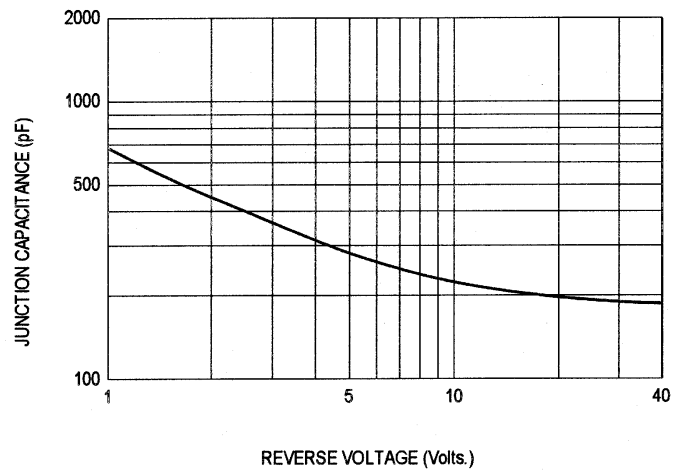
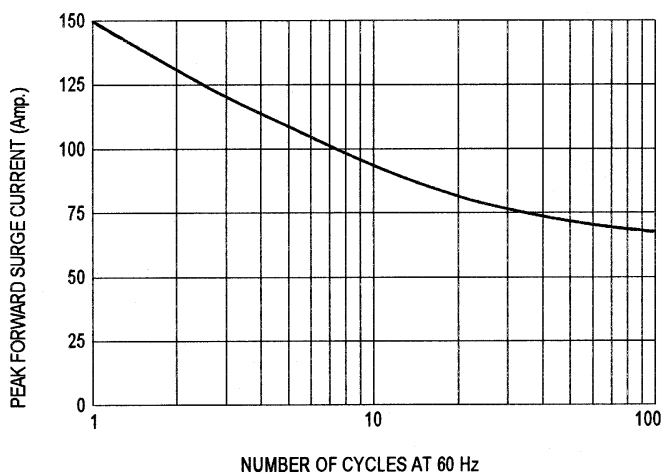


FIG-5 PEAK FORWARD SURGE CURRENT



# SR505 , SR506

FIG-1 FORWARD CURRENT DERATING CURVE

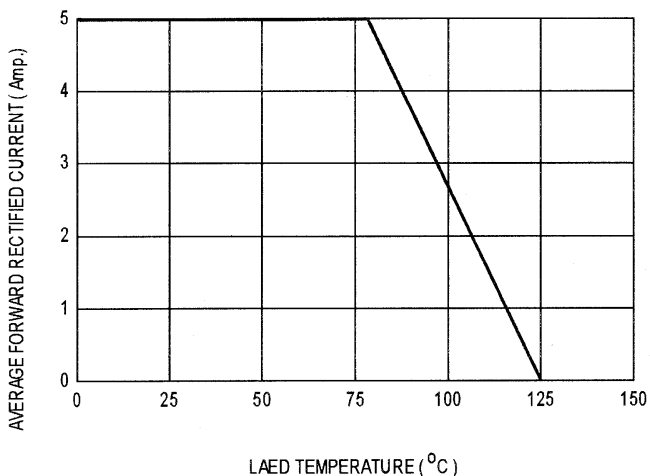


FIG-2 TYPICAL FORWARD CHARACTERISTICS

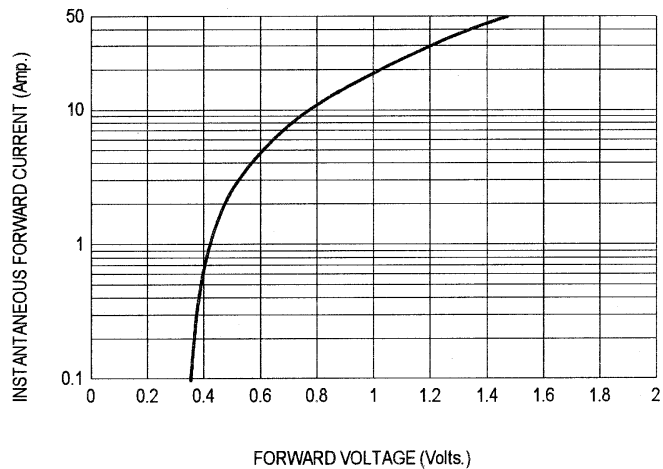


FIG-3 TYPICAL REVERSE CHARACTERISTICS

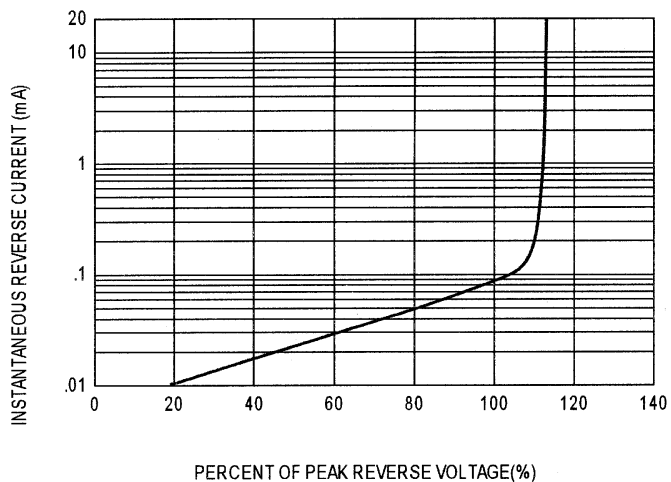


FIG-4 TYPICAL JUNCTION CAPACITANCE

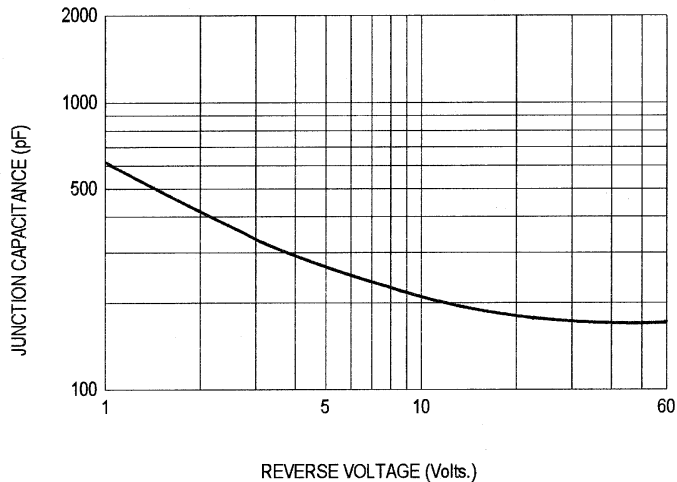


FIG-5 PEAK FORWARD SURGE CURRENT

