

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.

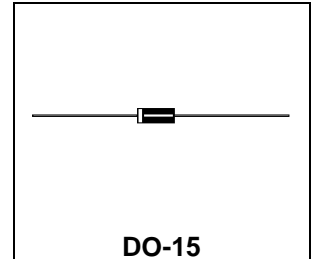
Features

- * Low Forward Voltage.
- * Low Switching noise.
- * High Current Capacity
- * Guarantee Reverse Avalanche.
- * Guard-Ring for Stress Protection.
- * Low Power Loss & High efficiency.
- * 150 Operating Junction Temperature
- * Low Stored Charge Majority Carrier Conduction.
- * Plastic Material used Carries Underwriters Laboratory Flammability Classification 94V-0
- * Moisture Sensitivity Level: MSL-1
- * *In compliance with EU RoHs 2002/95/EC directives*



SCHOTTKY BARRIER RECTIFIERS

**2.0 AMPERES
20-60 VOLTS**



DIM	MILLIMETERS	
	MIN	MAX
A	2.00	2.70
B	25.40	---
C	5.50	7.60
D	0.70	0.90

CASE---
Transfer molded plastic

POLARITY---
Cathode indicated polarity band

MAXIMUM RATINGS

Characteristic	Symbol	SR202	SR203	SR204	SR205	SR206	Unit
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	28	42	V
Average Rectifier Forward Current	I_O	2.0					A
Non-Repetitive Peak Surge Current (Surge applied at rate load conditions half-wave, single phase, 60Hz)	I_{FSM}	50					A
Operating and Storage Junction Temperature Range	T_J, T_{STG}	-65 to +150					

ELECTRIAL CHARACTERISTICS

Characteristic	Symbol	SR202	SR203	SR204	SR205	SR206	Unit
Maximum Instantaneous Forward Voltage ($I_F = 2.0$ Amp)	V_F	0.55			0.70		V
Maximum Instantaneous Reverse Current (Rated DC Voltage, $T_C = 25$) (Rated DC Voltage, $T_C = 125$)	I_R	0.5			10		mA
Maximum Thermal Resistance Junction to Case	$R_{\theta JC}$	50					$^{\circ}C/W$
Typical Junction Capacitance (Reverse Voltage of 4 volts & $f = 1$ MHz)	C_P	105			90		pF

SR202 Thru SR206

FIG-1 FORWARD CURRENT DERATING CURVE

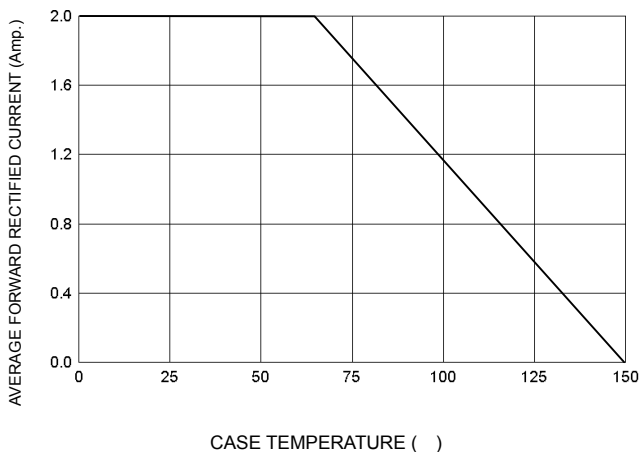


FIG-2 TYPICAL FORWARD CHARACTERISTICS

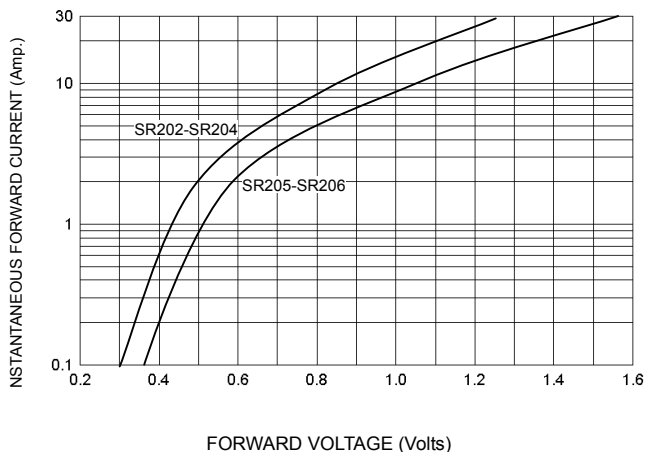


FIG-3 TYPICAL REVERSE CHARACTERISTICS

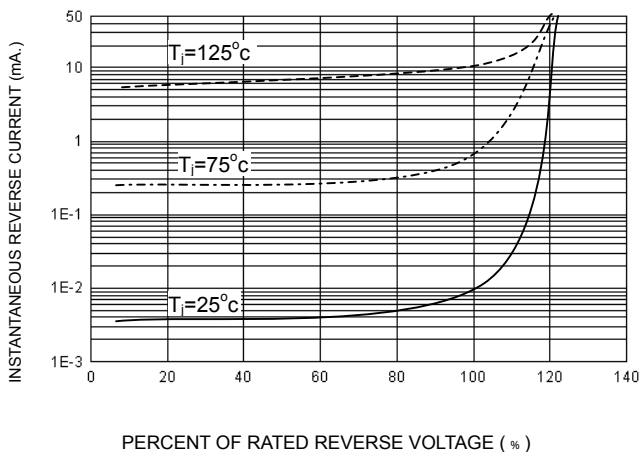


FIG-4 TYPICAL JUNCTION CAPACITANCE

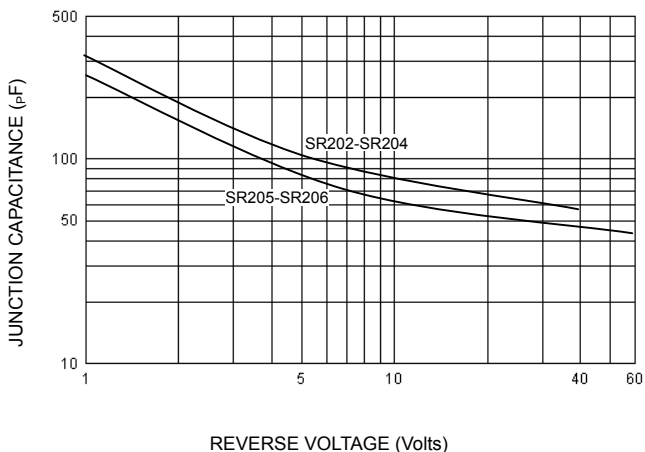


FIG-5 PEAK FORWARD SURGE CURRENT

