

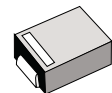
**Surface Mount
Schottky Barrier Rectifiers**

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, in surface mount applications where compact size and weight are critical to the system.

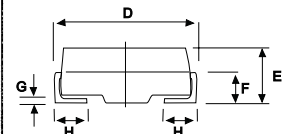
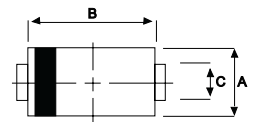
- * Low Forward Voltag.
- * Low Switching noise.
- * High Current Capacity
- * Guarantee Reverse Avalance.
- * Guard-Ring for Stress Protection.
- * Low Power Loss & High efficiency.
- * 125 °C Operating Junction Temperature
- * Low Stored Charge Majority Carrier Cnduction.
- * Plastic Material used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

**SCHOTTKY BARRIER
RECTIFIERS**

**1.0 AMPERES
20-40 VOLTS**



DO-214AA(SMB)



DIM	MILLMETERS	
	MIN	MAX
A	3.30	3.90
B	4.20	4.60
C	1.80	2.20
D	4.90	5.60
E	1.90	2.50
F	---	1.30
G	---	0.22
H	0.85	1.45

MAXIMUM RATINGS

Characteristic	Symbol	MS17	MS18	MS19	Unit
Peak Repetitive Reverse Voltage	V_{RRM}				V
Working Peak Reverse Voltage	V_{RWM}	20	30	40	
DC Blocking Voltage	V_R				
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	V
Average Rectifier Forward Current	I_O	1.0			A
Non-Repetitive Peak Surge Current (Surge applied at rate load conditions halfware, single phase, 60Hz)	I_{FSM}	25			A
Operating and Storage Junction Temperature Range	T_J, T_{stg}	- 65 to + 125			°C

ELECTRICAL CHARACTERISTICS

Characteristic	Symbol	MS17	MS18	MS19	Unit
Maximum Instantaneous Forward Voltage ($I_F=1.0$ Amp) ($I_F=3.0$ Amp)	V_F	0.450 0.750	0.550 0.875	0.600 0.900	V
Maximum Instantaneous Reverse Current (Rated DC Voltage, $T_C = 25$ °C) (Rated DC Voltage, $T_C = 100$ °C)	I_R	1.0 20			mA
Typical Junction Capacitance (Reverse Voltage of 4 volts & $f=1$ MHz)	C_P	90	80		pF

CASE---
Transfer molded plastic

POLARITY---
Cathode indicated polarity band

FIG-1 FORWARD CURRENT DERATING CURVE

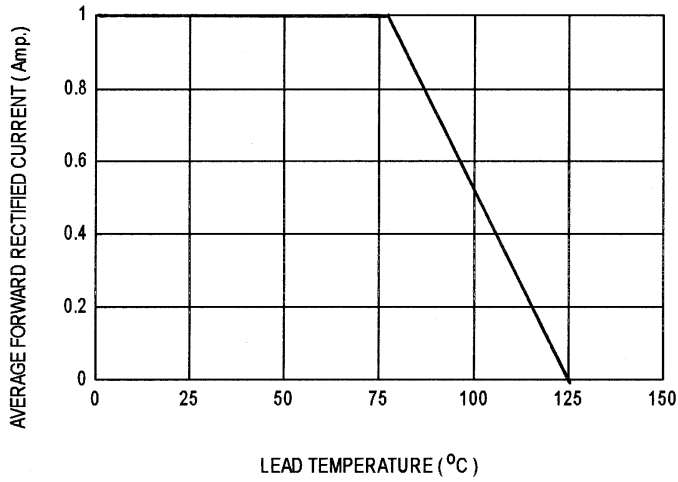


FIG-2 TYPICAL FORWARD CHARACTERISTICS

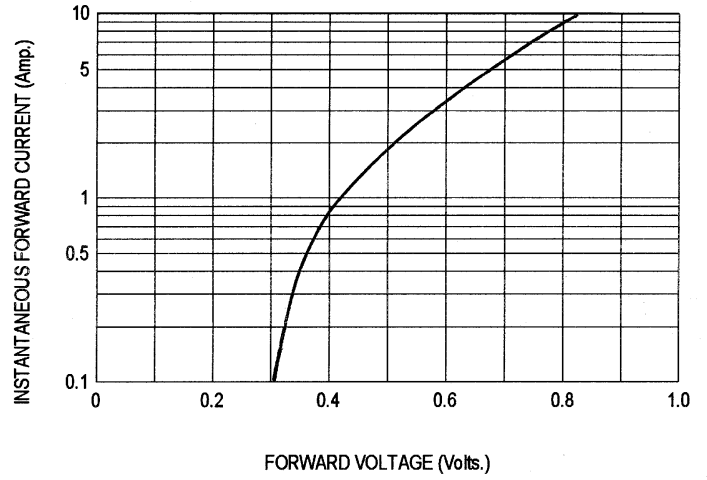


FIG-3 TYPICAL REVERSE CHARACTERISTICS

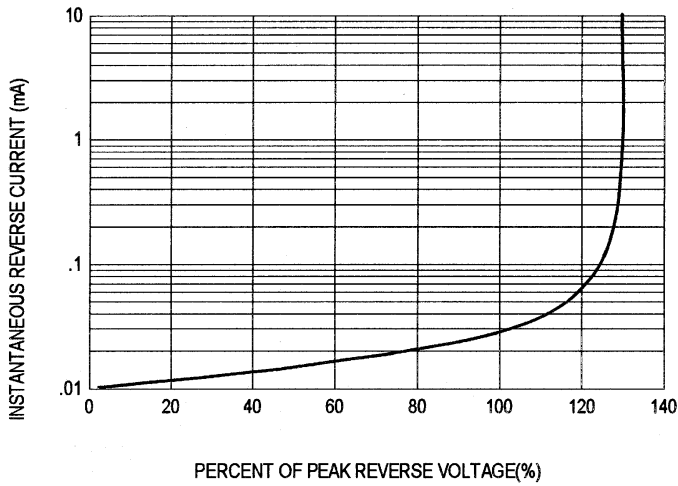


FIG-4 TYPICAL JUNCTION CAPACITANCE

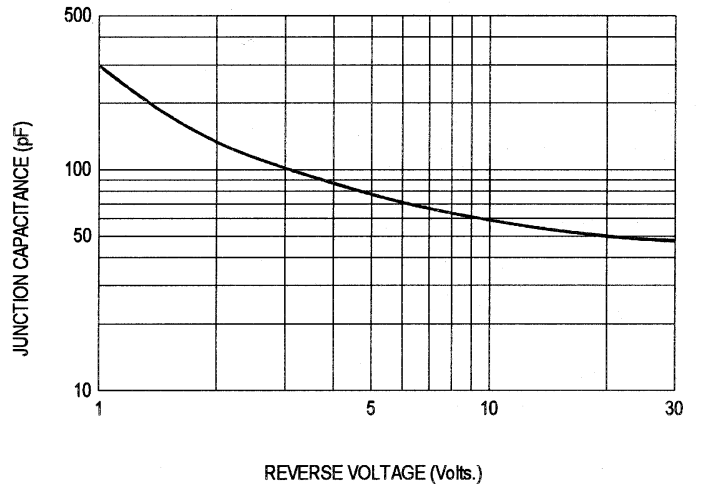
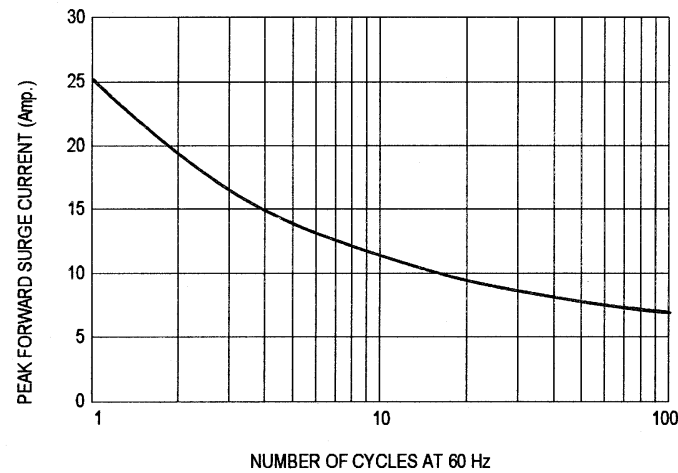


FIG-5 PEAK FORWARD SURGE CURRENT



MS18, MS19

FIG-1 FORWARD CURRENT DERATING CURVE

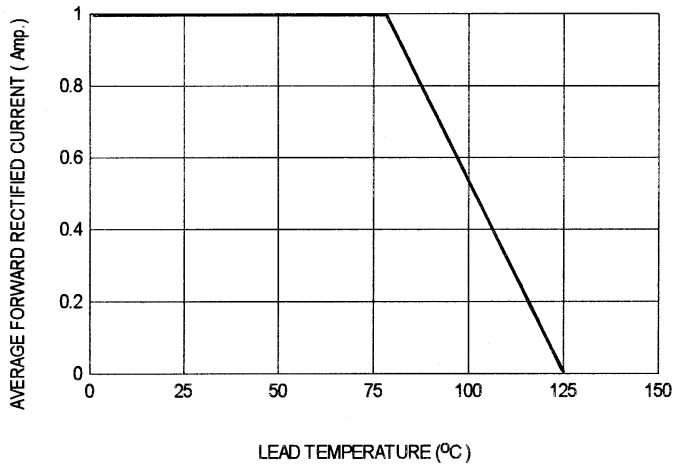


FIG-2 TYPICAL FORWARD CHARACTERISTICS

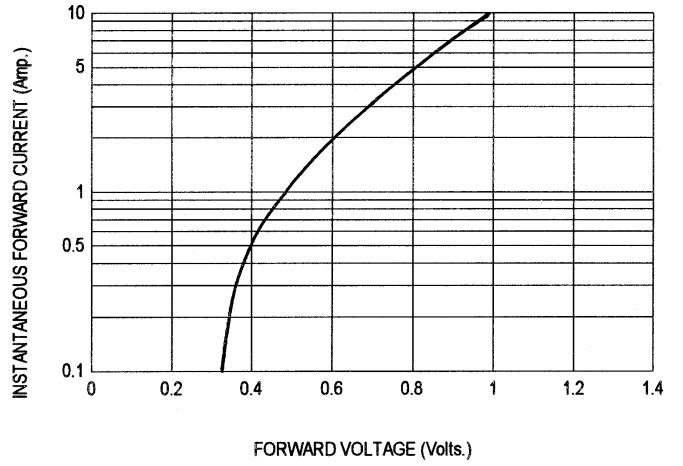


FIG-3 TYPICAL REVERSE CHARACTERISTICS

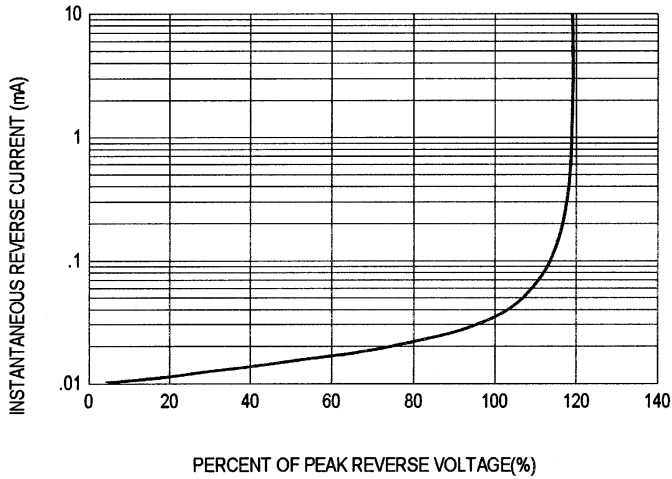


FIG-4 TYPICAL JUNCTION CAPACITANCE

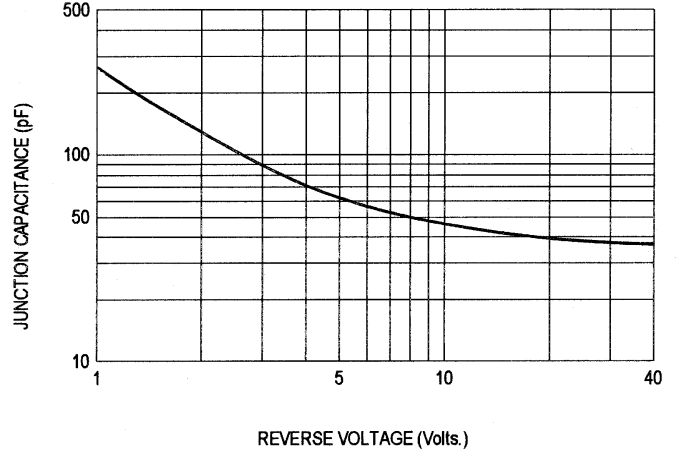


FIG-5 PEAK FORWARD SURGE CURRENT

