

Schottky Barrier Rectifiers

Using the Schottky Barrier principle with a Refractory metal capable of high temperature operation metal. The proprietary barrier technology allows for reliable operation up to 150°C junction temperature. 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.

Features

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

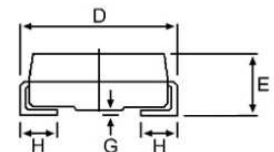
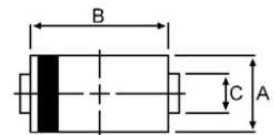


SCHOTTKY BARRIER RECTIFIERS

**3.0 AMPERES
100 VOLTS**



DO-214AC(SMA)



DIM	MILLIMETERS	
	MIN	MAX
A	2.20	2.80
B	3.90	4.50
C	1.25	1.70
D	4.70	5.30
E	1.90	2.50
G		0.203
H	0.75	1.55

MAXIMUM RATINGS

Characteristic	Symbol	SKT310	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	100	V
RMS Reverse Voltage	$V_{R(RMS)}$	70	V
Average Rectifier Forward Current	I_O	3.0	A
Non-Repetitive Peak Surge Current (Surge applied at rate load conditions half-wave, single phase, 60Hz)	I_{FSM}	100	A
Operating Junction and Storage Temperature Range	T_J, T_{STG}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Maximum Instantaneous Forward Voltage ($I_F = 3$ Amp $T_C = 25^\circ C$) ($I_F = 3$ Amp $T_C = 125^\circ C$)	V_F	---	0.55 0.50	0.62 ---	V
Maximum Instantaneous Reverse Current (Rated DC Voltage, $T_C = 25^\circ C$) (Rated DC Voltage, $T_C = 125^\circ C$)	I_R	---	3.0 2.2	50 ---	μA mA
Typical Total Capacitance (Reverse Voltage of 4 volts & f=1 MHz)	C_P		370		pF

CASE---
Transfer molded plastic

POLARITY---
Cathode indicated polarity band

FIG-1 TYPICAL FORWARD CURRENT DERATING CURVE

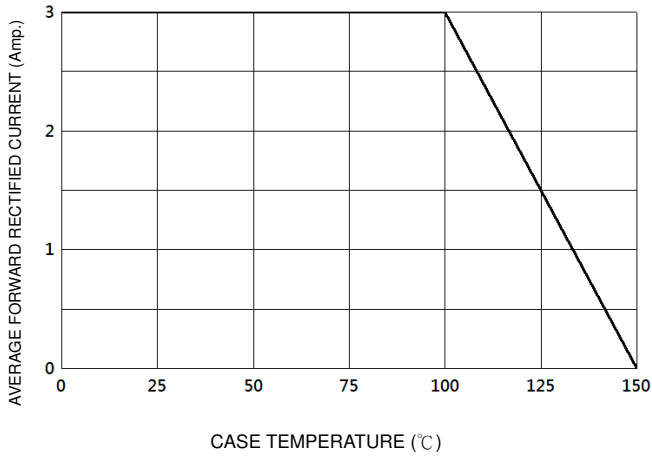


FIG-2 TYPICAL FORWARD CHARACTERISTICS

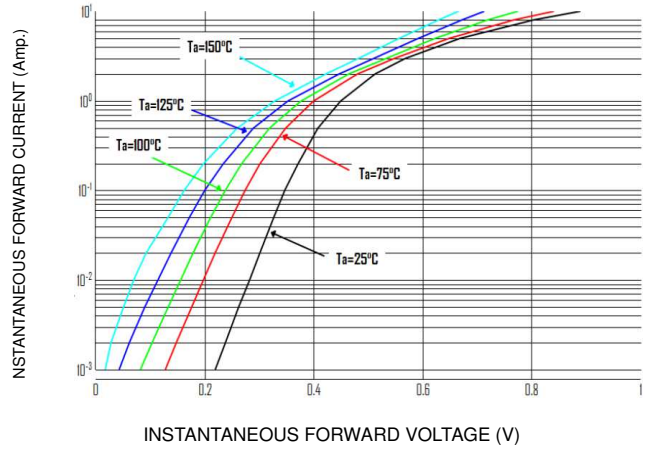


FIG-3 TYPICAL REVERSE CHARACTERISTICS

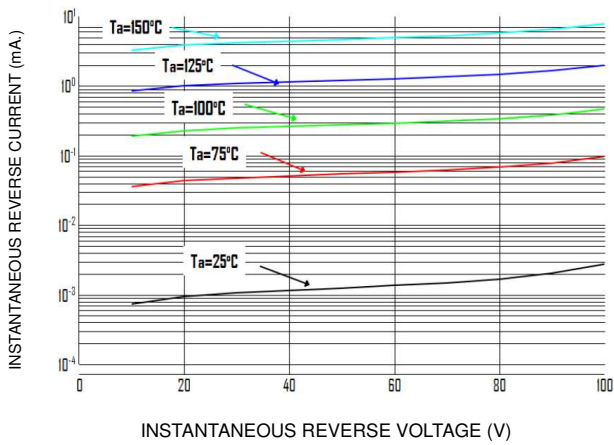


FIG-4 TYPICAL TOTAL CAPACITANCE

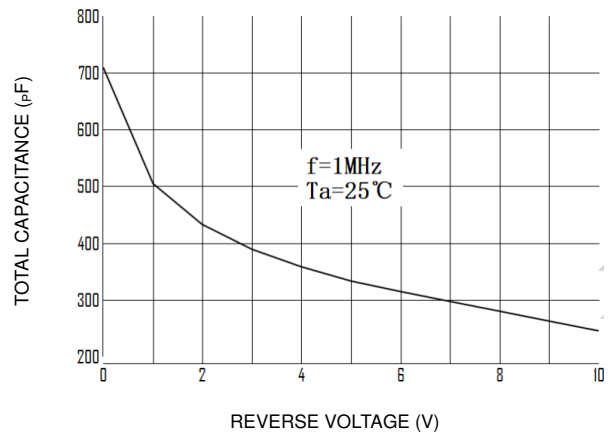
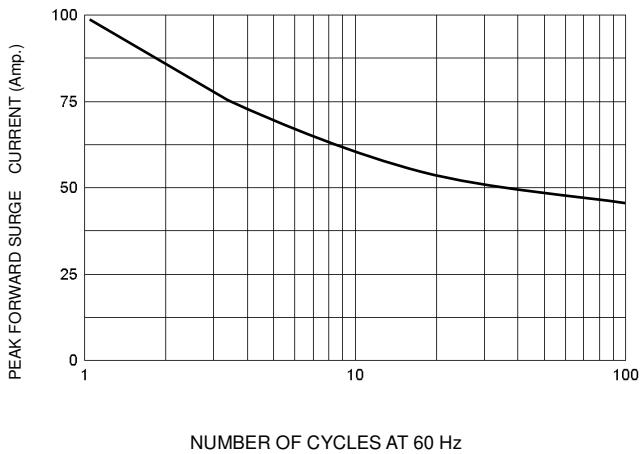


FIG-5 TYPICAL PEAK FORWARD SURGE CURRENT



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