

Surface Mount Schottky Barrier rectifiers

Using the Schottky Barrier principle with a Refractory metal capable of high temperature operation metal. proprietary barrier technology allows for reliable operation up to 150°C junction temperature. Typical application are in switching Mode Power Supplies such as adaptors, DC/DC converters 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.
- * 150°C Operating Junction Temperature
- * Low Stored Charge Majority Carrier Conduction.
- * Plastic Material used Carries Underwriters Laboratory
- * Flammability Classification 94V-O
- * Pb Free
- * In compliance with EU RoHs directives

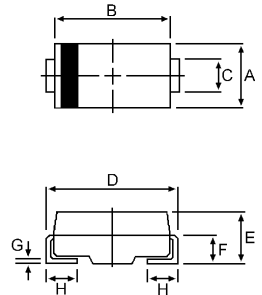


SCHOTTKY BARRIER RECTIFIERS

**1.0 AMPERES
100 VOLTS**



DO-214AC(SMA)



DIM	MILLIMETERS	
	MIN	MAX
A	2.20	2.80
B	4.10	4.70
C	1.30	1.70
D	4.70	5.30
E	1.90	2.50
F	---	1.30
G	---	0.22
H	0.95	1.50

MAXIMUM RATINGS

Characteristic	Symbol	SK110	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	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 +150	°C

ELECTRICAL CHARACTERISTICS

Characteristic	Symbol	SK110	Unit
Maximum Instantaneous Forward Voltage ($I_F = 1$ Amp)	V_F	0.85	V
Maximum Instantaneous Reverse Current (Rated DC Voltage, $T_C = 25^\circ\text{C}$) (Rated DC Voltage, $T_C = 100^\circ\text{C}$)	I_R	0.1 5	mA
Maximum Thermal Resistance Junction to case	$R_{\theta JC}$	65	°C/W
Typical Junction Capacitance (Reverse Voltage of 4 volts & $f = 1$ MHz)	C_P	60	pF

CASE---
Transfer molded plastic

POLARITY---
Cathode indicated polarity band

FIG-1 FORWARD CURRENT DERATING CURVE

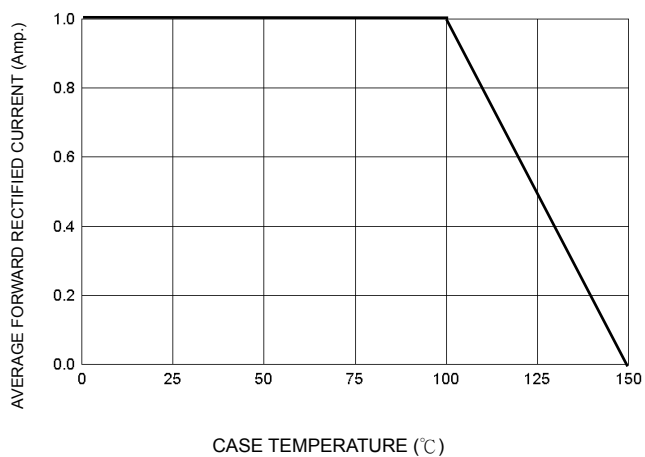


FIG-2 TYPICAL FORWARD CHARACTERISTICS

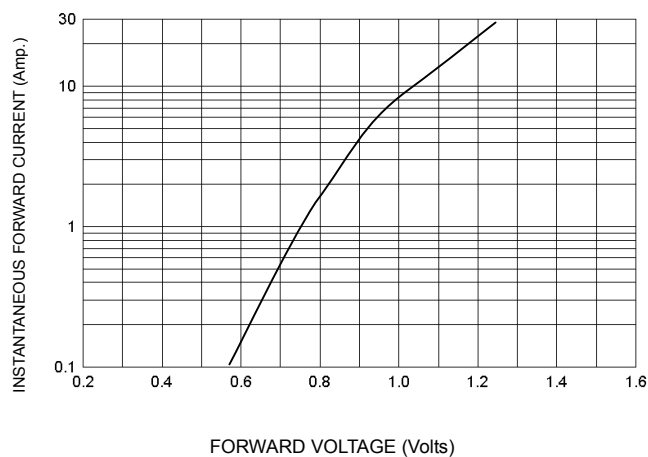


FIG-3 TYPICAL REVERSE CHARACTERISTICS

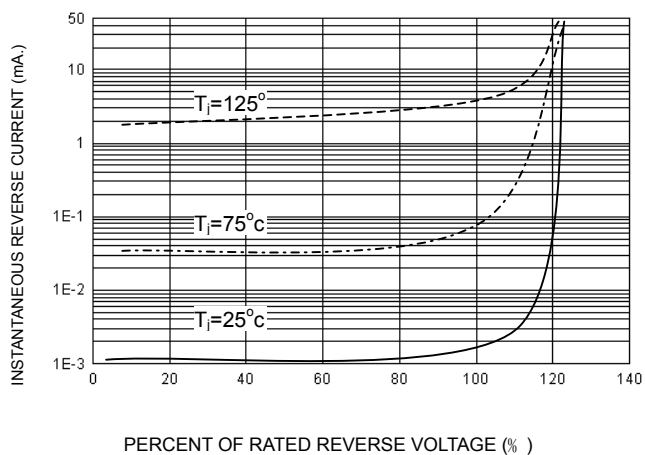


FIG-4 TYPICAL JUNCTION CAPACITANCE

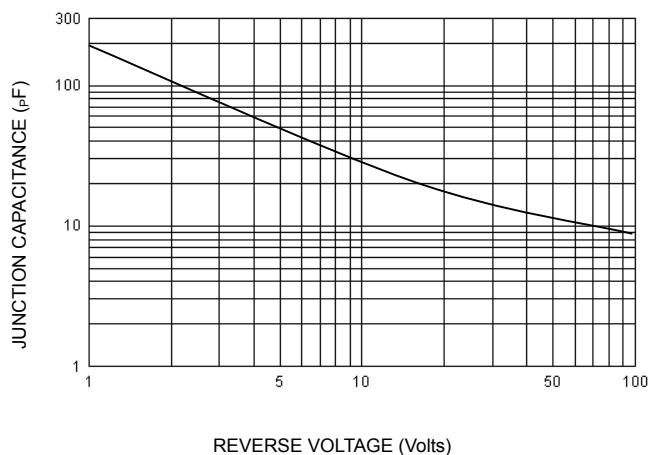
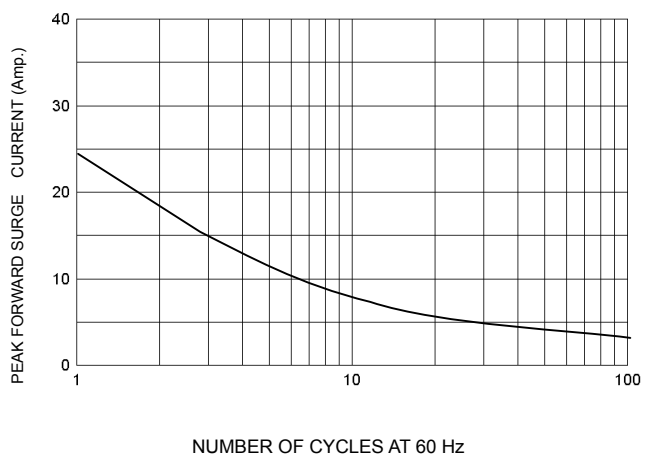


FIG-5 PEAK FORWARD SURGE CURRENT



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