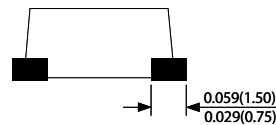
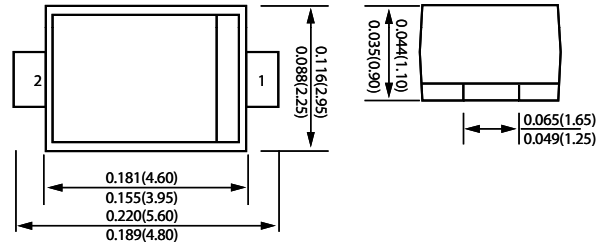
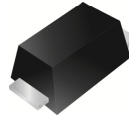


**5.0AMP SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS -20V-200V
SMAF(DO-221AC) PACKAGE**

FEATURES

- * Low profile package
- * Ideal for automated placement
- * Guard Ring for over voltage protection
- * Low forward voltage drop
- * RoHS Product for packing code suffix "G",
Halogen free product for packing code suffix "H"



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%

RATINGS	SYMBOL	SK52AF	SK53AF	SK54AF	SK55AF	SK56AF	SK58AF	SK510AF	SK515AF	SK520AF	UNIT
Marking Code		52AF	53AF	54AF	55AF	56AF	58AF	510AF	515AF	520AF	
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	100	150	200	Volts
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	56	70	105	140	Volts
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	100	150	200	Volts
Maximum Average Forward Rectified Current 0.375" (9.5mm) lead length (see Fig.1)	I _o	5.0									Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	100									Amps
Typical Thermal Resistance (Note 1)	R _{θJA} /R _{θJC}	120/90									°C/W
Typical Junction Capacitance (Note 2)	C _J	300			210		170		150	110	pF
Operating Temperature Range	T _J	-55 to +125							-55 to +150		°C
Storage Temperature Range	T _{STG}	-55 to +150									°C

CHARACTERISTICS	SYMBOL	SK52AF	SK53AF	SK54AF	SK55AF	SK56AF	SK58AF	SK510AF	SK515AF	SK520AF	UNIT	
Maximum Instantaneous Forward Voltage at I _o DC (Note 1)	V _F	0.55			0.70		0.85		0.87	0.90	Volts	
Maximum Average Reverse Current at Rated DC Blocking Voltage	@TC=25°C	0.5					0.2					mAmps
	@TC=100°C	10					5					

NOTES :1. Thermal Resistance for Junction to Ambient: Vertical PC Board Mounting, 0.5" (12.7mm) Lead Length.

Thermal Resistance for Junction to Case

2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.

3. Measured at Pulse Width 300µs, Duty Cycle 2%.

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

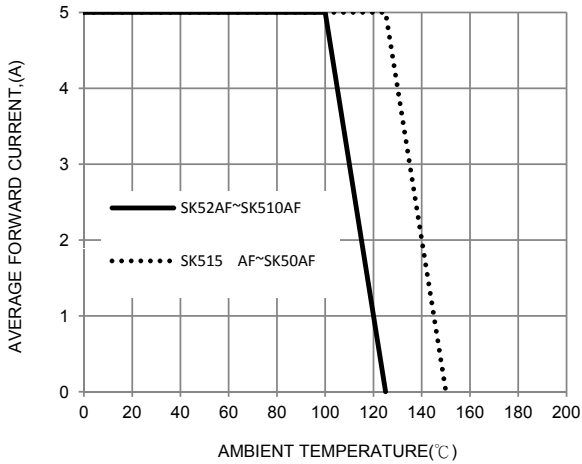


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

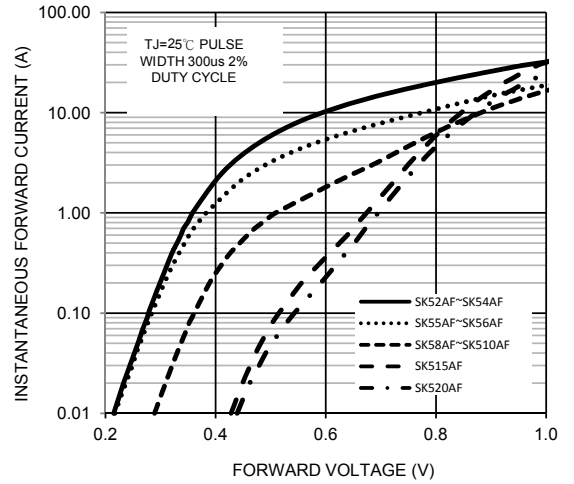


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

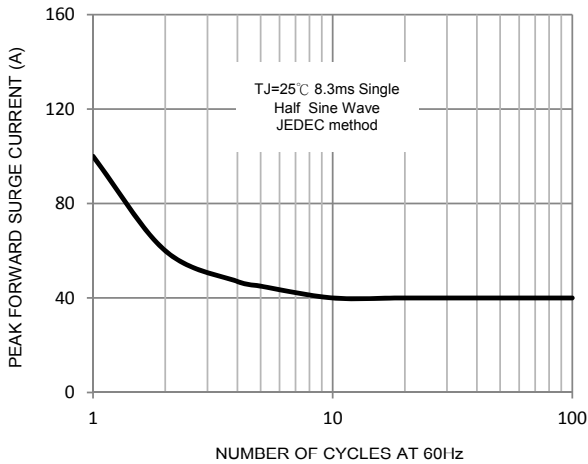


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

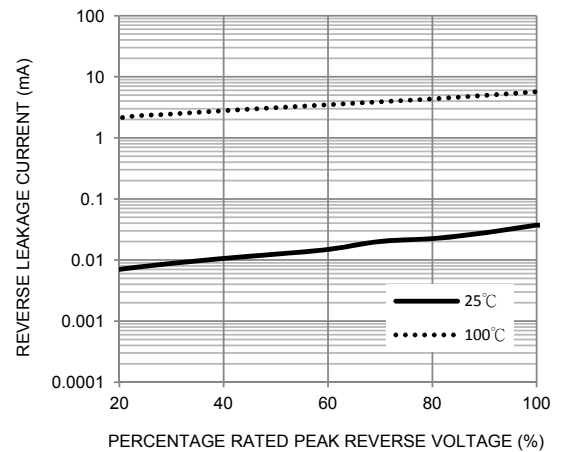


FIG. 5-TYPICAL JUNCTION CAPACITANCE

