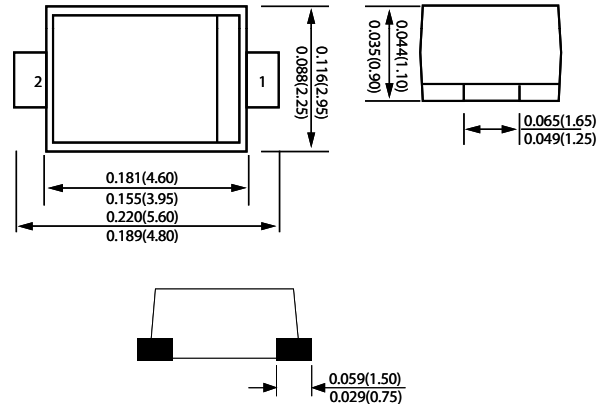
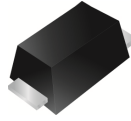


**3.0AMP SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS -20V-200V  
SMAF(DO-221AC) PACKAGE**

**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	SK32AF	SK33AF	SK34AF	SK35AF	SK36AF	SK38AF	SK310AF	SK315AF	SK320AF	UNIT	
Marking Code		32AF	33AF	34AF	35AF	36AF	38AF	310AF	315AF	320AF		
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	50	60	80	100	150	200	Volts	
Maximum RMS Voltage	V <sub>RMS</sub>	14	21	28	35	42	56	70	105	140	Volts	
Maximum DC Blocking Voltage	V <sub>DC</sub>	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 <sub>o</sub>	3.0									Amps	
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	80									Amps	
Typical Thermal Resistance (Note 1)	R <sub>θJA</sub> /R <sub>θJC</sub>	70/30									°C/W	
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	180			150		110		100		80	pF
Operating Temperature Range	T <sub>J</sub>	-55 to +125							-55 to +150			°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150									°C	

CHARACTERISTICS	SYMBOL	SK32AF	SK33AF	SK34AF	SK35AF	SK36AF	SK38AF	SK310AF	SK315AF	SK320AF	UNIT	
Maximum Instantaneous Forward Voltage at 3.0A DC(Note 1)	V <sub>F</sub>	0.45	0.5		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

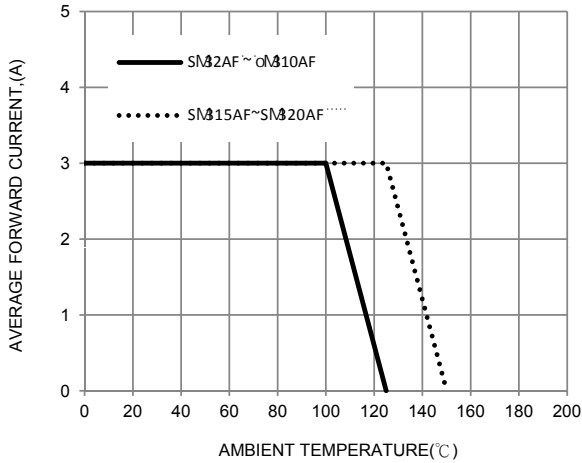


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

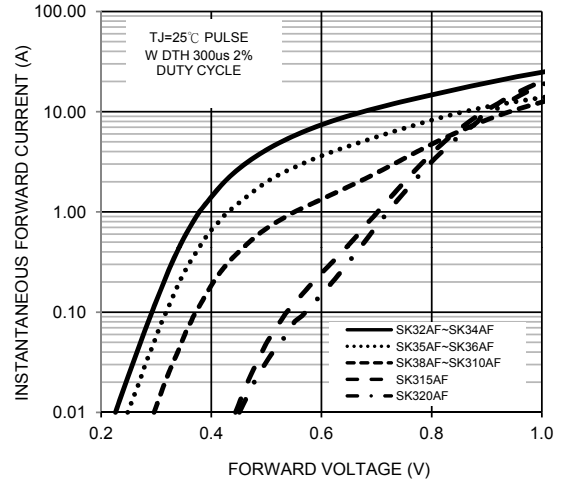


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

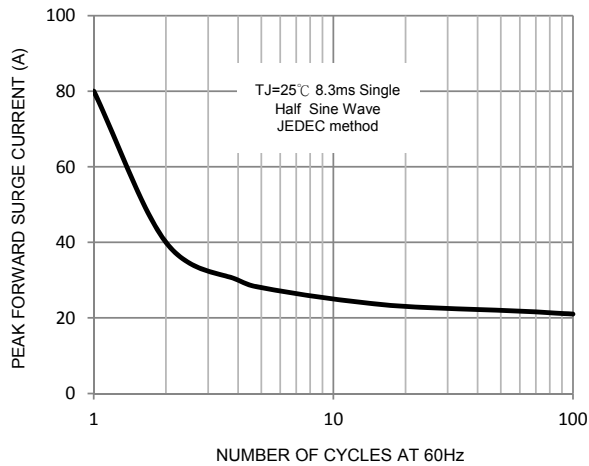


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

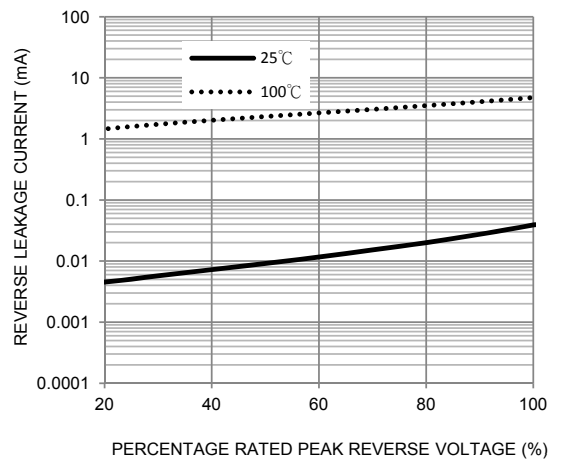


FIG. 5-TYPICAL JUNCTION CAPACITANCE

