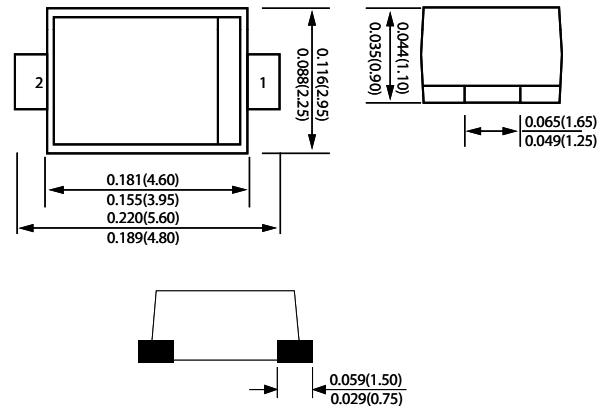
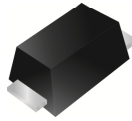


**1.0AMP SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS -20V-200V  
SMAF(DO-221AC) PACKAGE**

**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"



**MECHANICAL DATA**

- \* Case: Molded plastic, DO-221AC/ SMAF
- \* Epoxy: UL 94V-O rate flame retardant
- \* Terminals: Solder Plated, solderable per  
MIL-STD-750, Method 2026
- \* Mounting position: Cathod Band
- \* Weight: Approximated 0.032 gram.

**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	SK12AF	SK13AF	SK14AF	SK15AF	SK16AF	SK18AF	SK110AF	SK115AF	SK120AF	UNIT
Marking Code		12AF	13AF	14AF	15AF	16AF	18AF	110AF	115AF	120AF	
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>	1.0									Amps
Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	30									Amps
Typical Thermal Resistance (Note 1)	R <sub>θJA</sub> /R <sub>θJC</sub>	120/90									°C/W
Typical Junction Capacitance (Note 2)	C <sub>J</sub>	90	70	60	50	35					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	SK12AF	SK13AF	SK14AF	SK15AF	SK16AF	SK18AF	SK110AF	SK115AF	SK120AF	UNIT
Maximum Instantaneous Forward Voltage at 1.0A DC(Note)	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

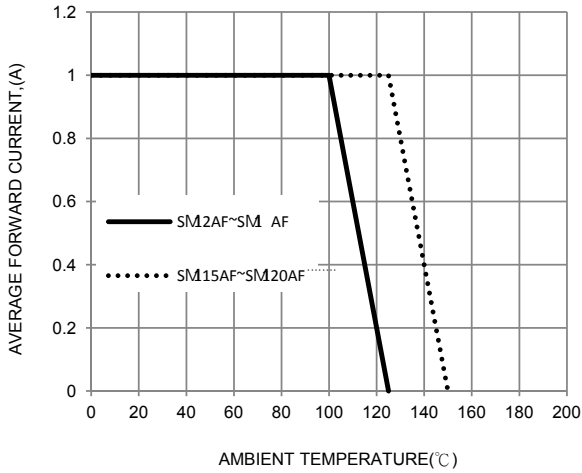


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

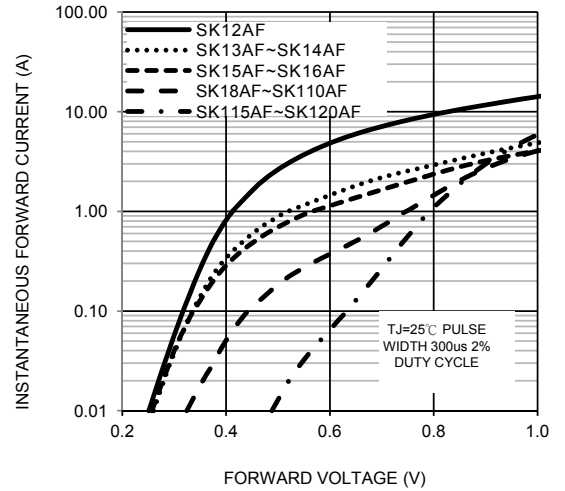


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

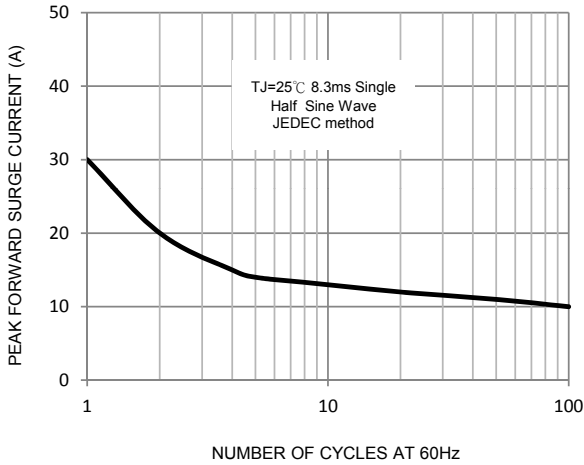


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

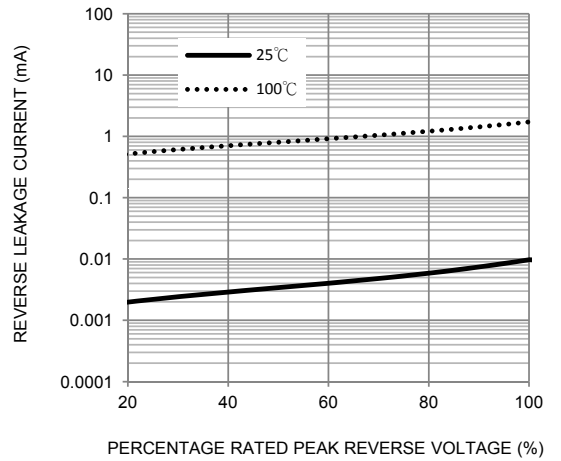


FIG. 5-TYPICAL JUNCTION CAPACITANCE

