

SK52AF/SS52AF~SK520AF/SS520AF 5.0Amp Surface Mount Schottky Barrier Rectifiers

Features

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Low power loss,high efficiency
- ◆ Built-in strain relief,ideal for automated placement
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed:
250°C/10 seconds at terminals

Mechanical Data

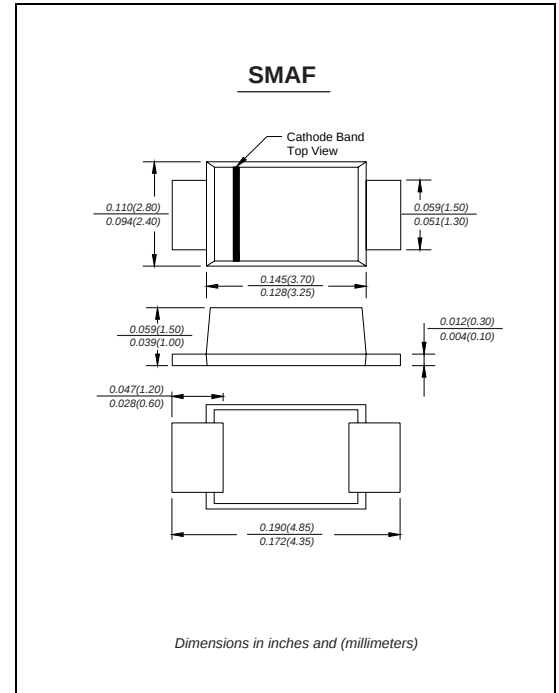
Case: JEDEC SMAF molded plastic body

Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight : 0.0014 ounce, 0.038 grams



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 current derate by 20%.

	SYMBOLS	SS52AF SK52AF	SS53AF SK53AF	SS54AF SK54AF	SS55AF SK55AF	SS56AF SK56AF	SS58AF SK58AF	SS510AF SK510AF	SS515AF SK515AF	SS520AF SK520AF	UNITS	
Maximum repetitive 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	150	VOLTS	
Maximum DC blocking voltage	V _{DC}	20	30	40	50	60	80	100	150	200	VOLTS	
Maximum average forward rectified current at T _L (see fig.1)	I _(AV)	5.0									Amps	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	125.0									Amps	
Maximum instantaneous forward voltage at 5.0A	V _F	0.55			0.70		0.85		0.95		Volts	
Maximum DC reverse current T _A =25°C at rated DC blocking voltage T _A =100°C	I _R	0.5							0.2		mA	
		20				10		2.0				
Typical junction capacitance (NOTE 1)	C _J	550			350						pF	
Typical thermal resistance (NOTE 2)	R _{θJA}	50.0									°C/W	
Operating junction temperature range	T _J	-65 to +125					-65 to +150					°C
Storage temperature range	T _{STG}	-65 to +150									°C	

Note:1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

2.P.C.B. mounted with 0.2x0.2”(5.0x5.0mm) copper pad areas

Ratings And Characteristic Curves

SK(S)52AF THRU SK(S)520AF

FIG. 1- FORWARD CURRENT DERATING CURVE

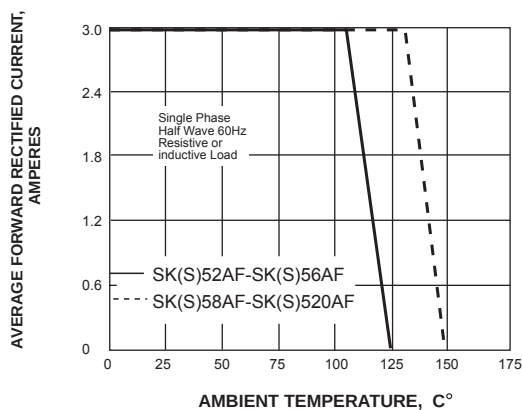


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

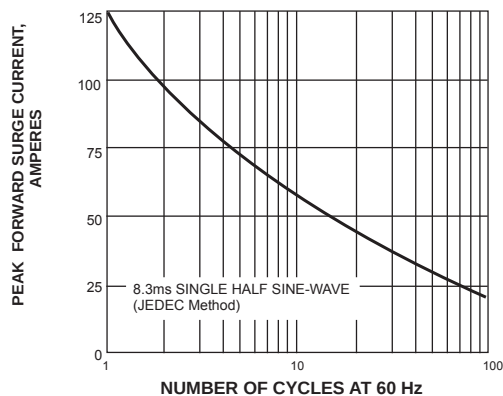


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

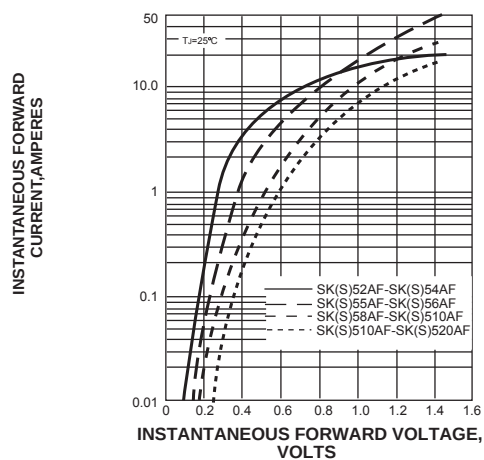


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

