

SK12 - SK1B

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

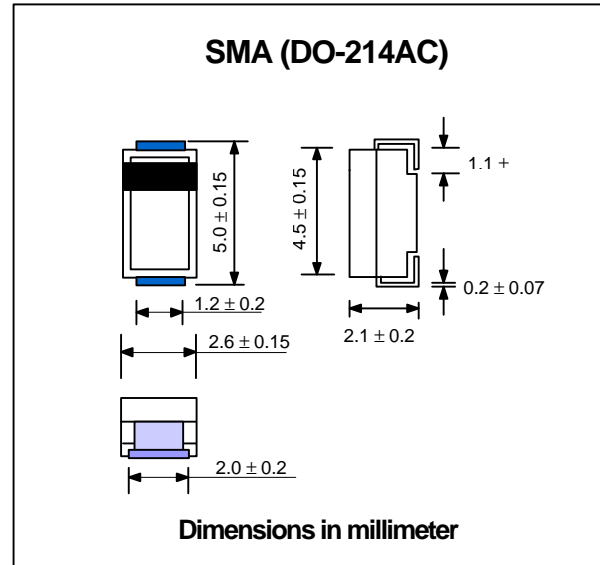
PRV : 20 - 100 Volts
I_o : 1.0 Ampere

FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * High efficiency
- * Low power loss
- * Low forward voltage drop
- * Low cost

MECHANICAL DATA :

- * Case : SMA Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Lead Formed for Surface Mount
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.064 gram



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25 °C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%.

RATING	SYMBOL	SK	SK	SK	SK	SK	SK	SK	SK	SK	SK	UNITS	
		12	13	14	15	16	17	18	19	1B			
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	70	80	90	100		Volts	
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	49	56	63	70		Volts	
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	70	80	90	100		Volts	
Maximum Average Forward Current See Fig.1	I _{F(AV)}	1.0										Amp.	
Peak Forward Surge Current, 8.3ms single half sine wave superimposed on rated load (JEDEC Method)	I _{FSM}	40										Amps.	
Maximum Forward Voltage at I _F = 1.0 Amp.	V _F	0.5			0.7			0.79				Volt.	
Maximum Reverse Current at Ta = 25 °C	I _R	0.5										mA	
Rated DC Blocking Voltage (Note 1) Ta = 100 °C	I _{R(H)}	10.0			5.0							mA	
Typical Thermal Resistance	R _{θJL}	15										°C/W	
Junction Temperature Range	T _J	- 40 to + 125					- 65 to + 150						°C
Storage Temperature Range	T _{STG}	- 65 to + 150										°C	

Notes :

(1) Pulse Test : Pulse Width = 300 μs, Duty Cycle = 2%.

RATING AND CHARACTERISTIC CURVES (SK12 - SK1B)

FIG.1 - FORWARD CURRENT DERATING CURVE

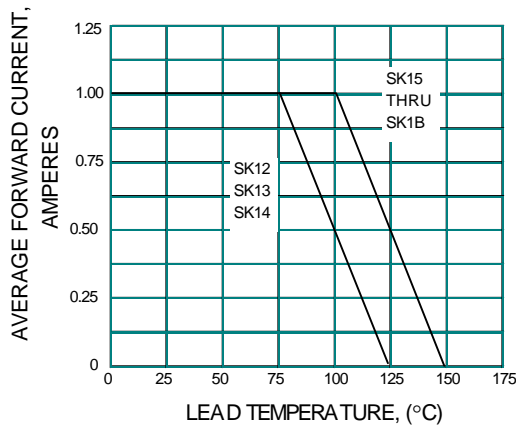


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

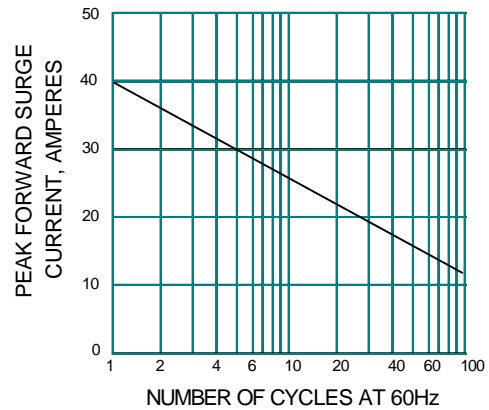


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

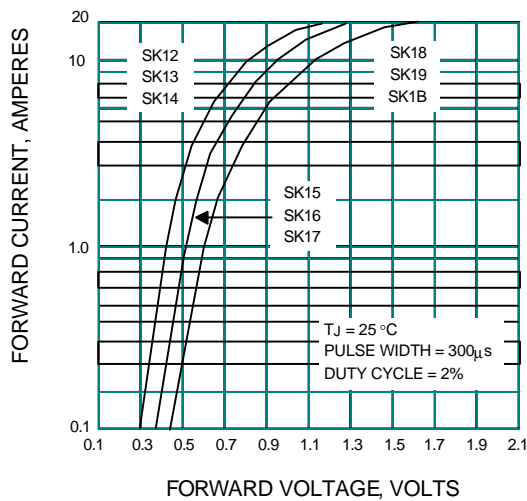


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

