

SL12 - SL13

PRV : 20 - 30 Volts
I_o : 1.5 Amperes

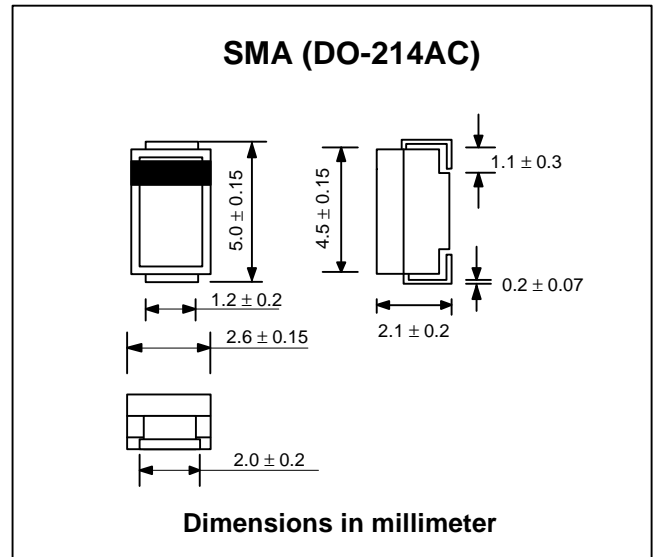
FEATURES :

- * High current capability
- * High surge current capability
- * High reliability
- * High efficiency
- * Low power loss
- * Low cost
- * Low forward voltage drop
- * Pb / RoHS Free

MECHANICAL DATA :

- * Case : SMA (DO-214AC) Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Lead : Lead Formed for Surface Mount
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.067 gram

LOW V_F SURFACE MOUNT SCHOTTKY RECTIFIERS



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	SL12	SL13	UNIT
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	20	30	V
Maximum RMS Voltage	V _{RMS}	14	21	V
Maximum DC Blocking Voltage	V _{DC}	20	30	V
Maximum Average Forward Current at T _L = 105 °C	I _{F(AV)}	1.5		A
Maximum Peak Forward Surge Current, 8.3ms single half sine wave superimposed on rated load (JEDEC Method)	I _{FSM}	50		A
Maximum Instantaneous Forward Voltage at (1)	V _F	I _F = 0.1A , T _a = 125°C	0.230	V
		I _F = 0.1A , T _a = 25°C	0.360	
		I _F = 1.0A , T _a = 125°C	0.340	
		I _F = 1.0A , T _a = 25°C	0.445	
Maximum Reverse Current at Rated DC Blocking Voltage (1)	I _r	T _a = 25 °C	0.2	mA
		T _a = 100 °C	6.0	
Maximum Thermal Resistance (2)	R _{θJA}	88		°C/W
	R _{θJL}	28		°C/W
Operating Junction Temperature Range	T _J	- 55 to + 125		°C
Storage Temperature Range	T _{STG}	- 55 to + 150		°C

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

(2) P.C.B. Mounted on 0.2 x 0.2" (5.0 x 5.0mm) Copper Pad Areas

RATING AND CHARACTERISTIC CURVES (SL12 - SL13)

FIG.1 - FORWARD CURRENT DERATING CURVE

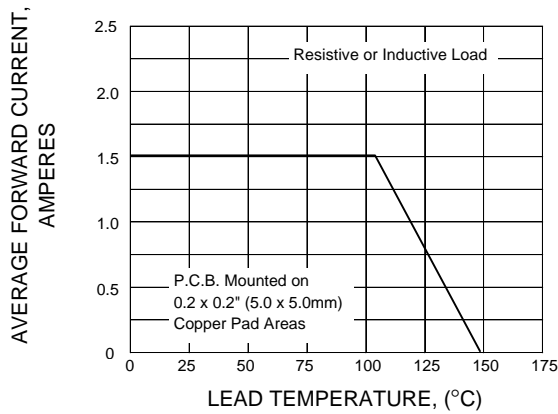


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

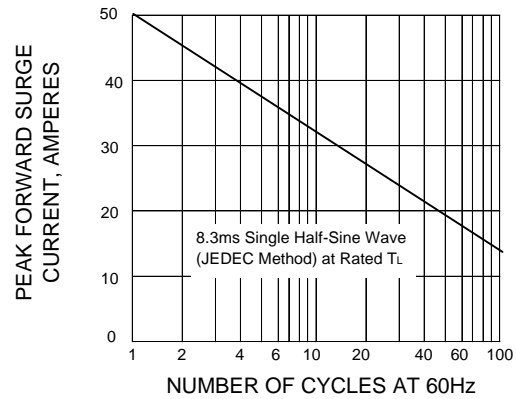


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

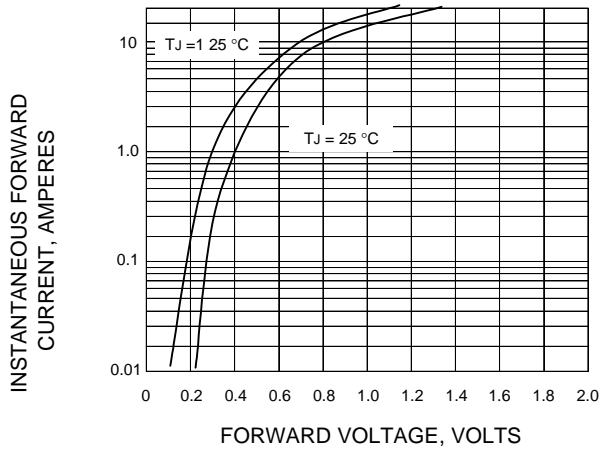


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

