

SS12 - SS110

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

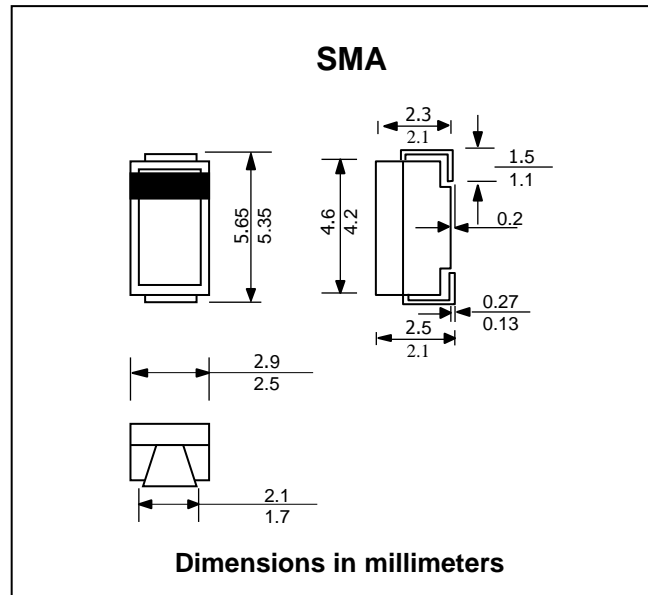
PRV : 20 - 100 Volts
I_o : 1.0 Ampere

FEATURES :

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

MECHANICAL DATA :

- * Case : SMA Molded plastic
- * Epoxy : UL94V-O rate flame retardant
- * Polarity : Color band denotes cathode end
- * Mounting position : Any
- * Weight : 0.060 gram (Approximately)



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	SS12	SS13	SS14	SS15	SS16	SS18	SS19	SS110	UNIT	
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	90	100	V	
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	56	63	70	V	
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	90	100	V	
Maximum Average Forward Current See Fig.1	I _{F(AV)}	1.0								A	
Maximum Peak Forward Surge Current, 8.3ms single half sine wave superimposed on rated load (JEDEC Method)	I _{FSM}	40								A	
Maximum Forward Voltage at I _F = 1.0 A	V _F	0.50		0.75		0.80				V	
Maximum Reverse Current at Ta = 25 °C	I _R	0.5								mA	
Rated DC Blocking Voltage ⁽¹⁾ Ta = 100 °C	I _{R(H)}	10		5.0						mA	
Typical Thermal Resistance ⁽²⁾	R _{θJL}	35								°C/W	
Operating Junction Temperature Range	T _J	- 65 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%.
- (2) Mounted on P.C. Board with 5.0mm² (0.013mm thick) copper pad areas.

RATING AND CHARACTERISTIC CURVES (SS12 - SS110)

FIG.1 - FORWARD CURRENT DERATING CURVE

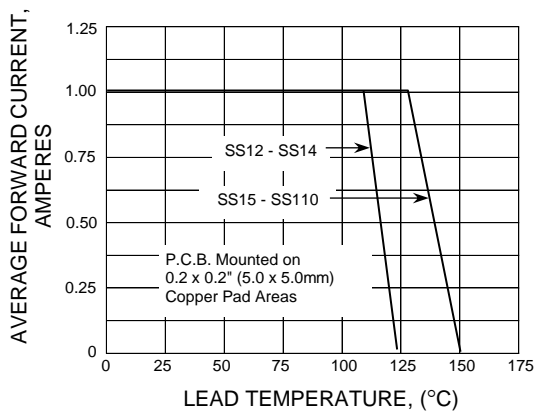


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

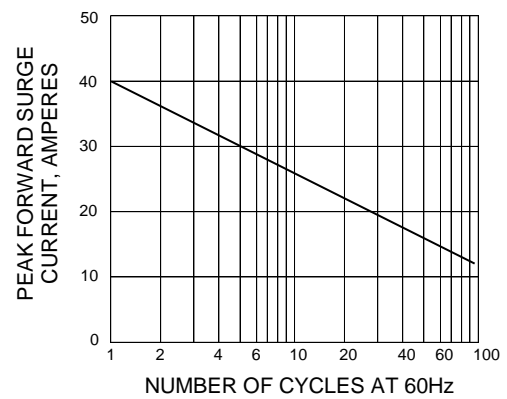


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

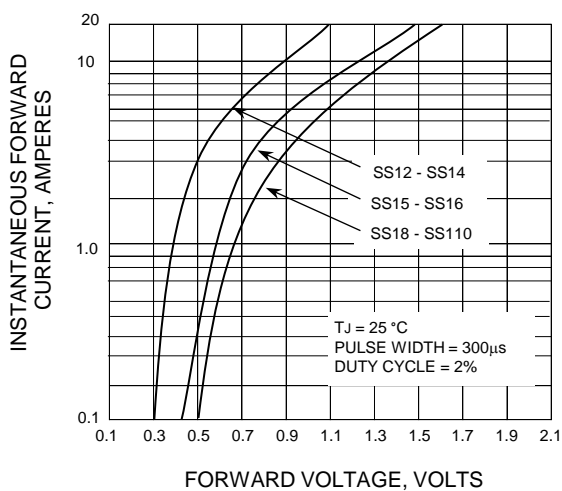


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

