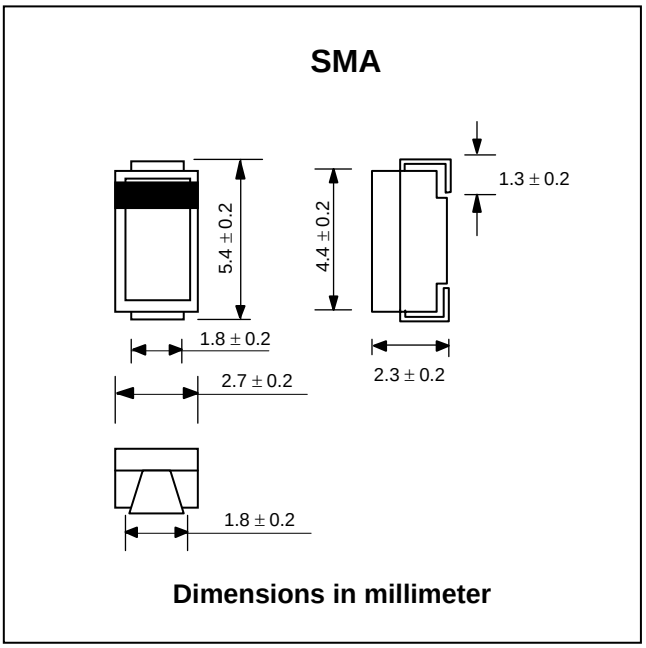
SS12 - SS110

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIERS

PRV : 20 - 100 Volts
Io : 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 specifie.
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)	$R_{\theta JL}$	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 5.0 mm^2 (0.013mm thick) copper pad areas.

RATING AND CHARACTERISTIC CURVES (SS12 - SS110)

FIG.1 - FORWARD CURRENT DERATING CURVE

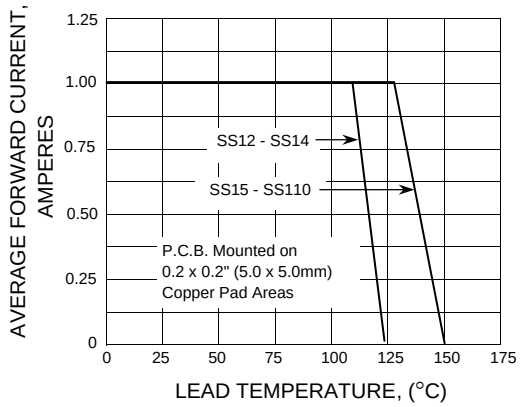


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

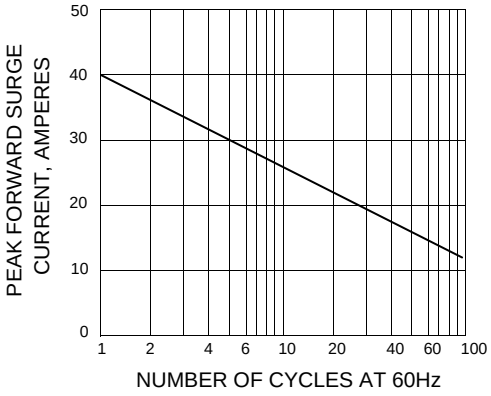


FIG.3 - TYPICAL FORWARD CHARACTERISTICS

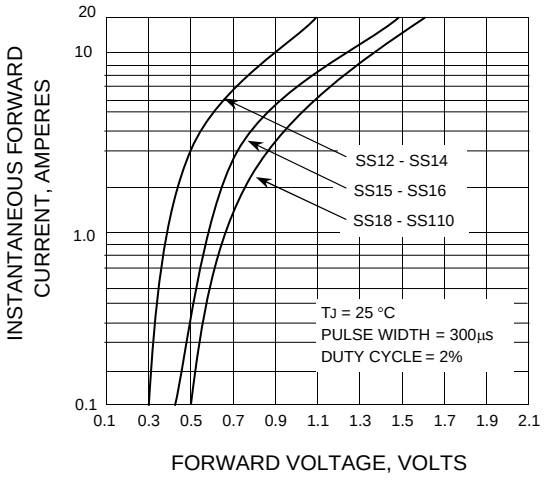


FIG.4 - TYPICAL REVERSE CHARACTERISTICS