



YENYO

SS12 THRU SS1D

Surface Mount Schottky Barrier Rectifier

Features

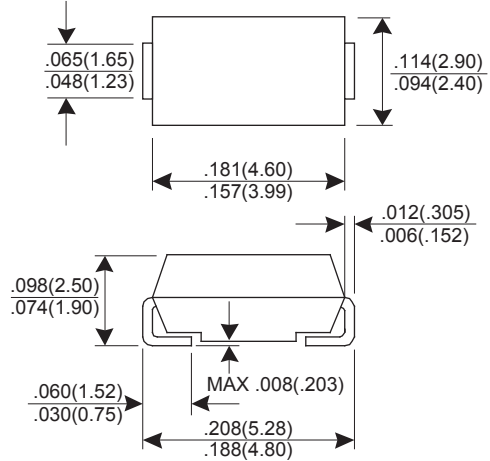
- ★ Low profile package
- ★ Ideal for automated placement
- ★ Guardring for overvoltage protection
- ★ Low power losses, high efficiency
- ★ Low forward voltage drop
- ★ High surge current capability

Mechanical Data

- ★ Case: Molded plastic SMA/DO-214AC
- ★ Epoxy: UL 94V-0 rate flame retardant
- ★ Terminals: Solderable per MIL-STD-750 method 2026
- ★ Polarity: Color band denotes cathode end
- ★ Mounting position: Any

**Voltage Range 20 to 200V
Current 1.0 Ampere**

SMA/DO-214AC



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

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

For capacitive load, derate current by 20%.

PARAMETER	SYMBOL	SS12	SS13	SS14	SS15	SS16	SS18	SS1B	SS1C	SS1D	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	V
Maximum RMS Voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	V
Maximum DC Blocking Voltage	V_{DC}	20	30	40	50	60	80	100	150	200	V
Maximum Average Forward Rectified Current	$I_{F(AV)}$	1.0									A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	30									A
Maximum Instantaneous Forward Voltage @ $I_F=1.0A$	V_F	0.50			0.70		0.85		0.95		V
Maximum DC Reverse Current @ $T_A=25^\circ C$ At Rated DC Blocking Voltage @ $T_A=100^\circ C$	I_R						0.2 6				mA
Typical Thermal Resistance (Note 1)	$R_{\theta JA}$	88									$^\circ C/W$
	$R_{\theta JL}$	28									$^\circ C/W$
Operating Junction Temperature Range	T_J	-55 to +125				-55 to +150					$^\circ C$
Storage Temperature Range	T_{STG}	-55 to +150									$^\circ C$

NOTES: (1) PCB mounted with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas

RATINGS AND CHARACTERISTIC CURVES SS12 THRU SS1D

FIG.1 - FORWARD CURRENT DERATING CURVE

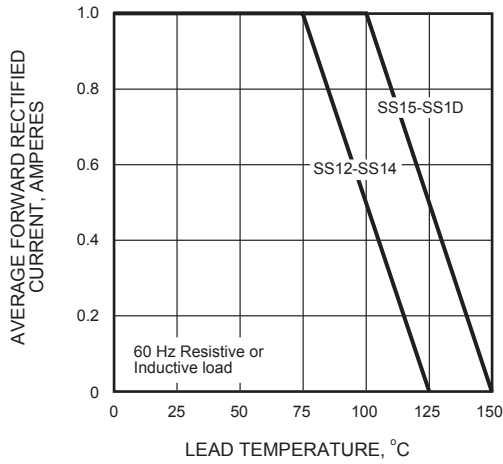


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

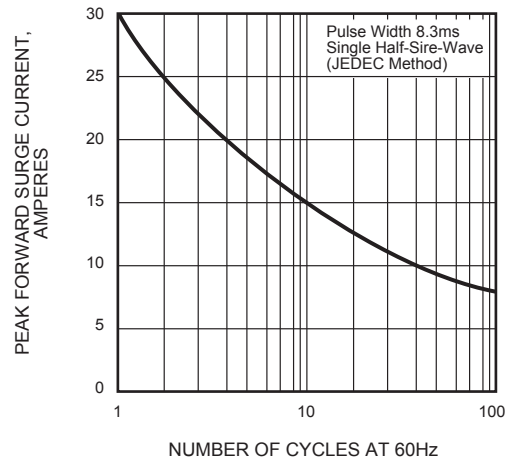


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

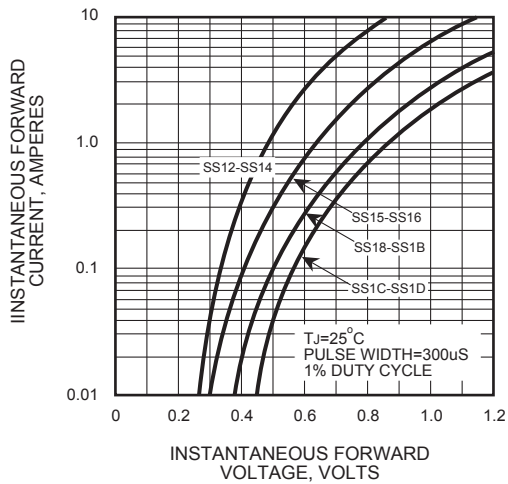


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

