

SS12 THRU SS120

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

VOLTAGE

20 THRU 200Volts

CURRENT

1.0 Ampers

SMA(DO-214AC)

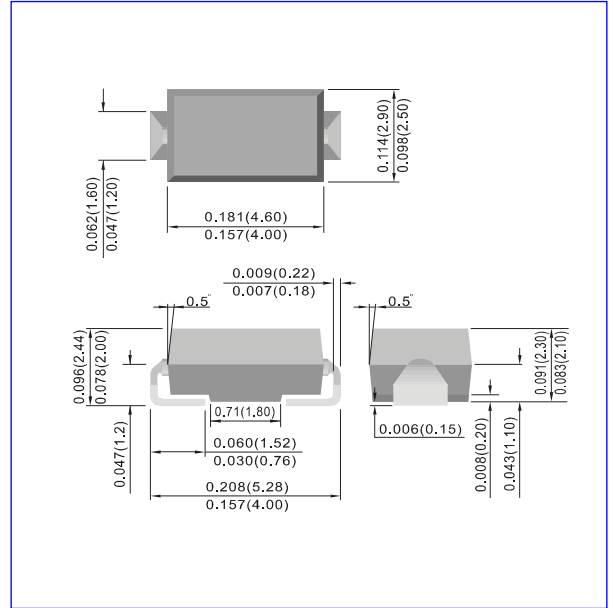
Unit:(mm)

FEATURES

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ For surface mounted applications
- ◆ Metal silicon junction, majority carrier conduction
- ◆ Low power loss, high efficiency
- ◆ Built-in strain relief, ideal for automated placement
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed: 250°C/10 seconds at terminals

MECHANICAL DATA

Case: JEDEC DO-214AC molded plastic body
Terminals: leads solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.002 ounce, 0.07 grams



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (TA=25°C (UNLESS OTHERWISE NOTED))

Single phase half wave, 60Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

	SYMBOLS	SS12	SS13	SS14	SS15	SS16	SS18	SS110	SS115	SS120	UNITS	
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	VOLTS	
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	VOLTS	
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	150	200	VOLTS	
Maximum average forward rectified current at T _L (see fig.1)	$I_{(AV)}$	1.0									Amp	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30.0									Amps	
Maximum instantaneous forward voltage at 1.0A	V_F	0.45	0.55	0.70			0.85		0.95		Volts	
Maximum DC reverse current at rated DC blocking voltage	I_R	0.5					5.0		2.0		mA	
Typical junction capacitance (NOTE 1)	C_J	110			90						pF	
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	88.0										°C/W
Operating junction temperature range	T_J	-65 to +125					-65 to +150					°C
Storage temperature range	T_{STG}	-65 to +150										°C

Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
 2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

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RATING AND CHARACTERISTIC CURVES

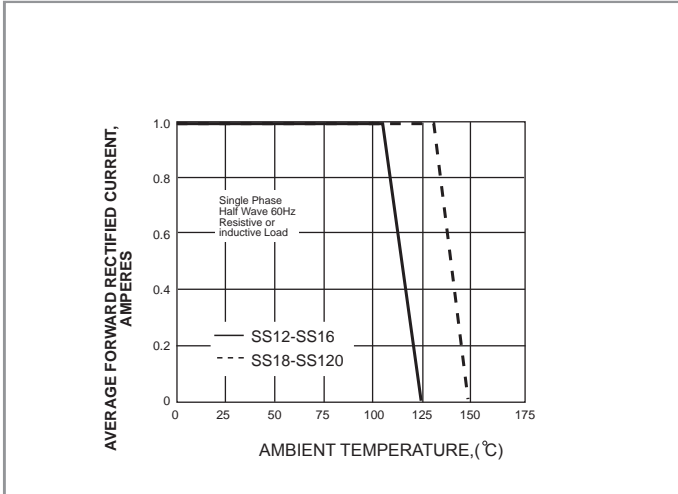


Fig. 1 FORWARD CURRENT DERATING CURVE

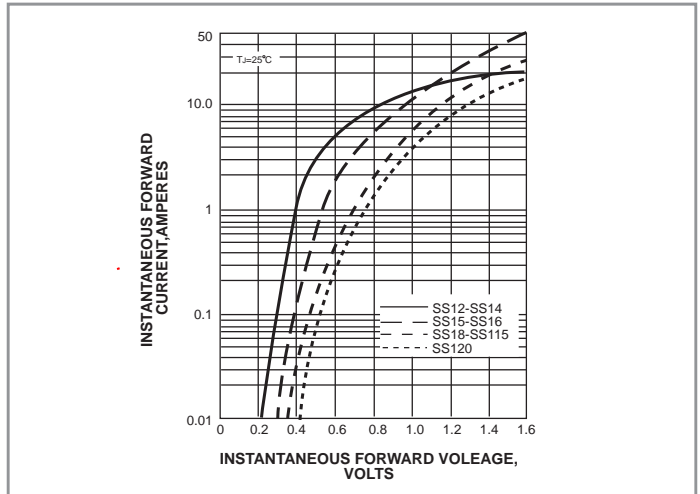


Fig. 2 TYPICAL INSTANTANEOUS FORWARD

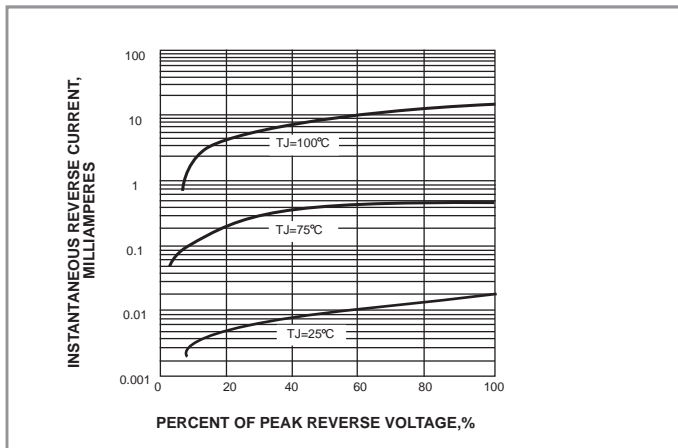


Fig. 3 TYPICAL REVERSE CHARACTERISTICS

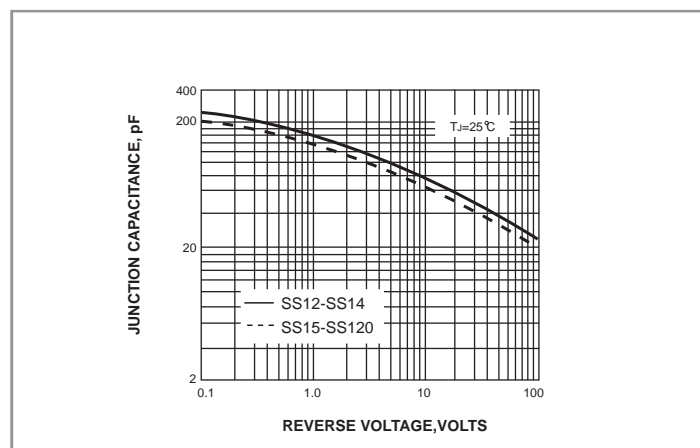


Fig. 4 TYPICAL JUNCTION CAPACITANCE

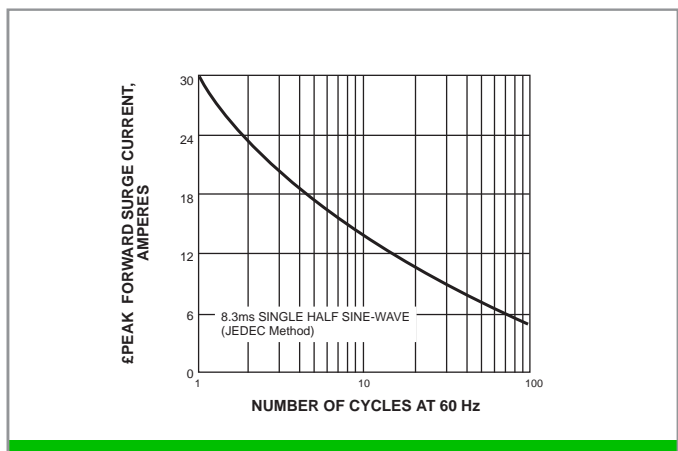


Fig. 5- MAXIMUM NON - REPETITIVE SURGE CURRENT

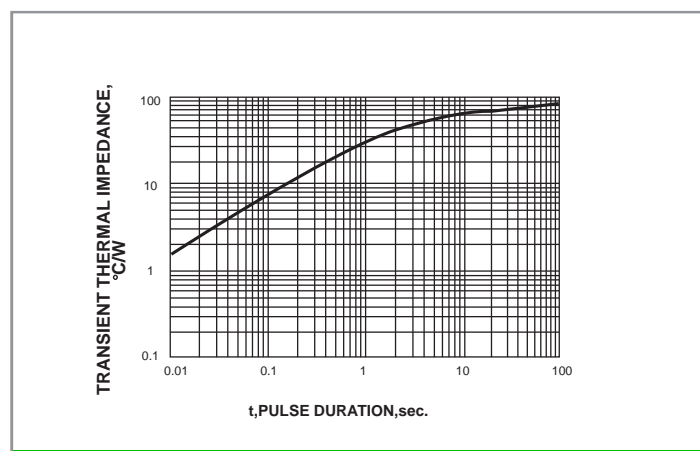


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

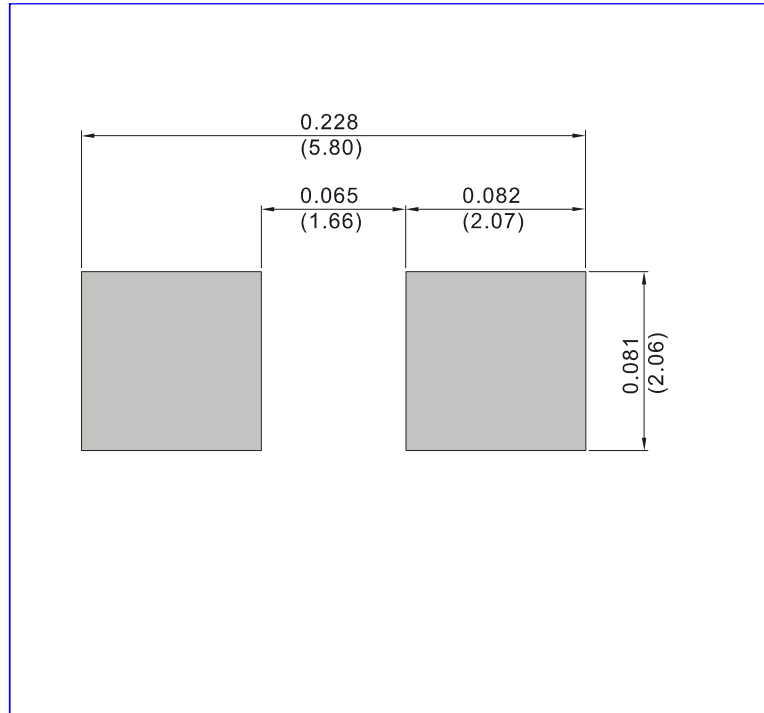
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MOUNTING PAD LAYOUT

SMA(DO-214AC)

Unit : inch(mm)



ORDER INFORMATION

- Packing information
 - T/R - 5K per 13" plastic Reel
 - T/R - 3K per 7" plastic Reel