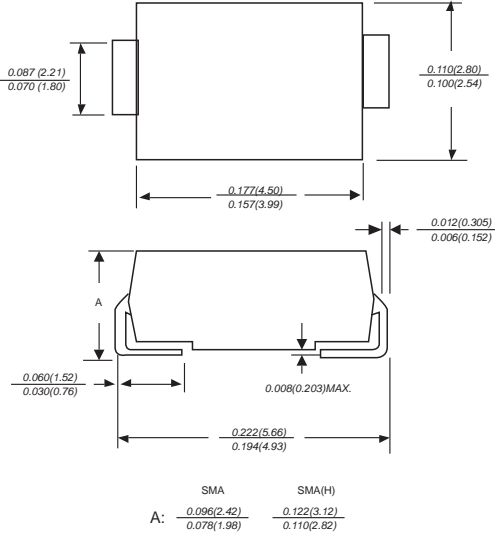


SS12 THRU SS110

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 20 to 100 Volts Forward Current - 1.0 Ampere

DO-214AC



Dimensions in inches and (millimeters)

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: 0.003 ounce, 0.093 grams
0.004 ounce, 0.111 grams SMA(H)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

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

	SYMBOLS	SS12	SS13	SS14	SS15	SS16	SS18	SS110	UNITS	
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	VOLTS	
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	70	VOLTS	
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	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}	40.0							Amps	
Maximum instantaneous forward voltage at 1.0A	V_F	0.45	0.55	0.70		0.85			Volts	
Maximum DC reverse current at rated DC blocking voltage	I_R	0.5							mA	
$T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$		6.0			5.0					
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

RATINGS AND CHARACTERISTIC CURVES SS12 THRU SS110

