

Amber Electronic Limited

SS12 THRU SS1200

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

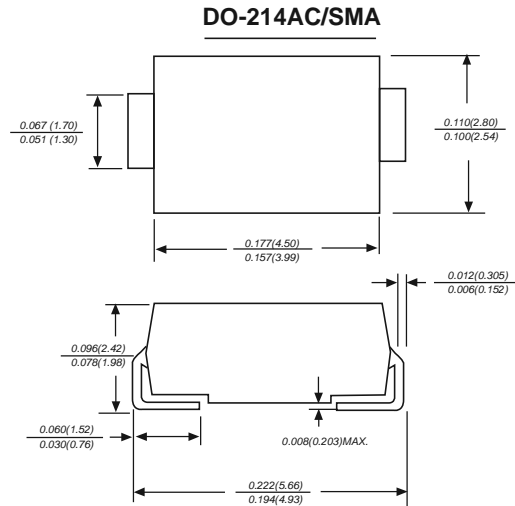
Reverse Voltage - 20 to 200 Volts Forward Current - 1.0 Ampere

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

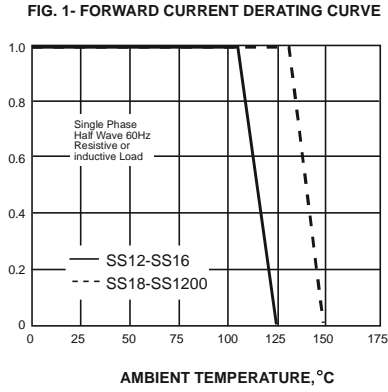
Ratings at 25°C ambient temperature unless otherwise specified.
 Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

Catalog Number	SYMBOLS	SS12	SS13	SS14	SS15	SS16	SS18	SS110	SS1150	SS1200	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					0.2				mA
$T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$		10.0			5.0		2.0				
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	-50 to +125					-50 to +150				°C
Storage temperature range	T_{STG}	-50 to +150									°C

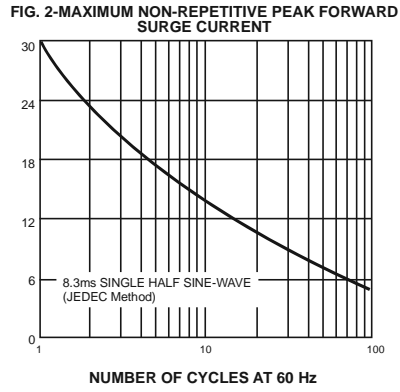
Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
 2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas

RATINGS AND CHARACTERISTIC CURVES SS12 THRU SS1200

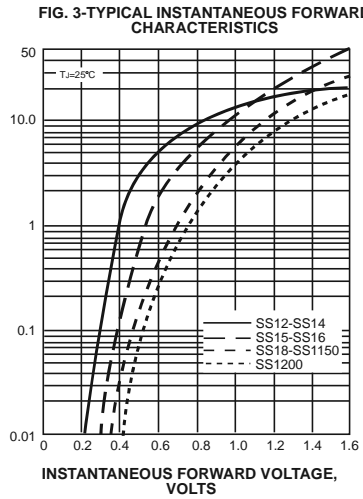
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES



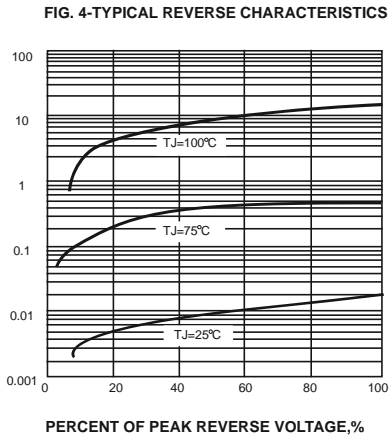
PEAK FORWARD SURGE CURRENT, AMPERES



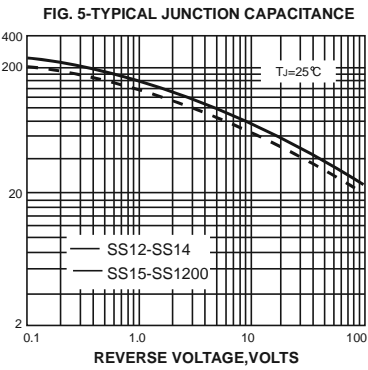
INSTANTANEOUS FORWARD CURRENT, AMPERES



INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES



JUNCTION CAPACITANCE, pF



TRANSIENT THERMAL IMPEDANCE, °C/W

