

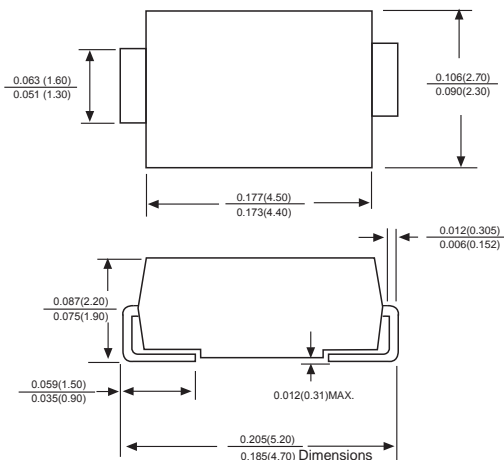


SS12G THRU SS1200G

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

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

DO-214AC/SMA



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: 0.002 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%.

MDD Catalog Number	SYMBOLS	SS12G	SS13G	SS14G	SS15G	SS16G	SS18G	SS110G	SS1150G	SS1200G	UNITS	
Marking code		MDD SS12G	MDD SS13G	MDD SS14G	MDD SS15G	MDD SS16G	MDD SS18G	MDD SS110G	MDD SS1150G	MDD SS1200G		
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 $T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$	I_R	0.5						0.2			mA	
Typical junction capacitance (NOTE 1)	C_J	110			90						pF	
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	88.0									$^\circ\text{C/W}$	
Operating junction temperature range	T_J	-50 to +125					-50 to +150					$^\circ\text{C}$
Storage temperature range	T_{STG}	-50 to +150									$^\circ\text{C}$	

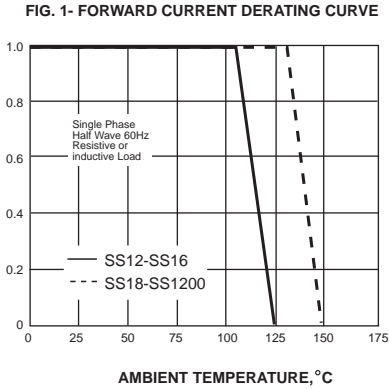
Note: 1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
 2. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas



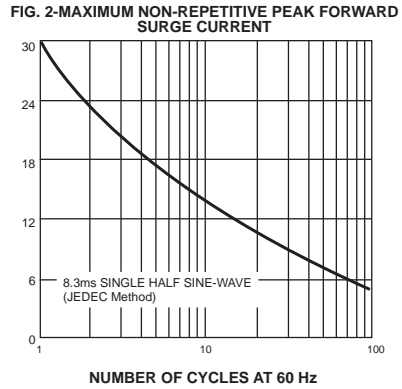
www.microdiode.com

RATINGS AND CHARACTERISTIC CURVES SS12G THRU SS1200G

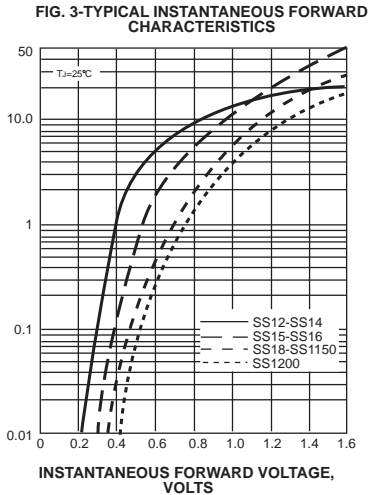
AVERAGE FORWARD RECTIFIED CURRENT,
AMPERES



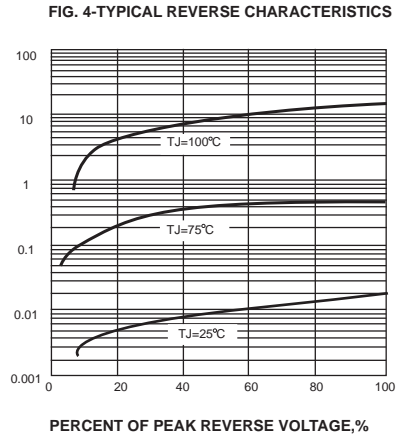
PEAK FORWARD SURGE CURRENT,
AMPERES



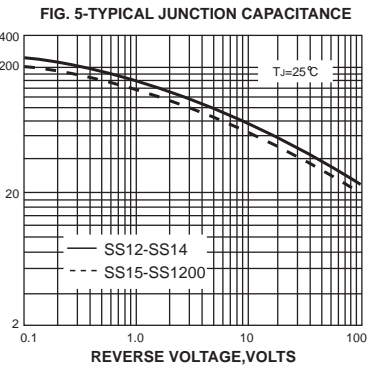
INSTANTANEOUS FORWARD CURRENT, AMPERES



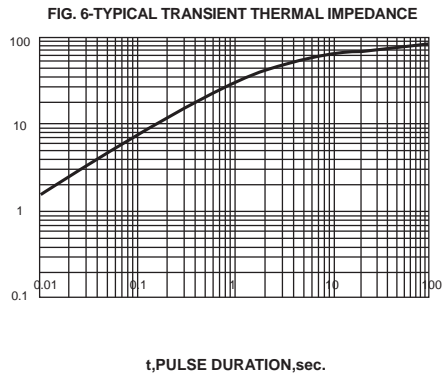
INSTANTANEOUS REVERSE CURRENT,
MILLIAMPERES



JUNCTION CAPACITANCE, pF



TRANSIENT THERMAL IMPEDANCE,
°C/W



The cruve graph is for reference only, can't be the basis for judgment(曲线图仅供参考)!

