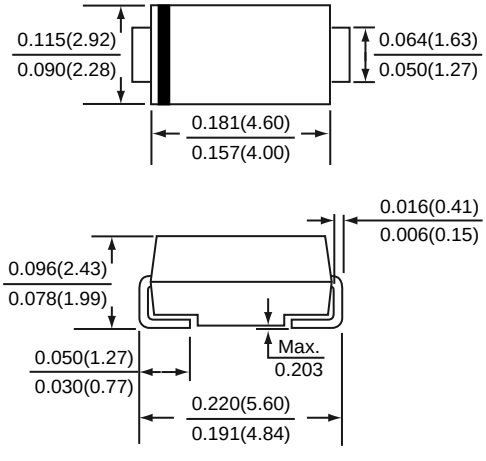
SS12 THRU SS110

SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER

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

SMA/DO-214AC



*Dimensions in inches and (millimeters)

FEATURES

* Plastic package has Underwriters Laboratory Flammability Classification 94V-0
* For surface mount applications
* Low profile package
* Built-in strain relief
* Metal sillicon junction, majority carrier conduction
* Low power loss, high efficiency
* High current capability, low forward voltage drop
* High surge capability
* For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
* Guardring for overvoltage protection
* High temperature soldering guaranteed : 260°C/10 seconds, at terminals

MECHANICAL DATA

Case : JEDEC DO-214AC molded plastic body
Terminals : Tin plated, solderable per MIL-STD-750D Method 2026
Polarity : Color band denotes cathode end
Weight : 0.002 ounes , 0.064 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.		*SYMBOLS*	***SS12***	***SS14***	***SS16***	***SS110***	*UNITS*
Maximum repetitive peak reverse voltage		V_{RRM}	20	40	60	100	Volts
Maximum RMS voltage		V_{RMS}	14	28	42	70	Volts
Maximum DC blocking voltage		V_{DC}	20	40	60	100	Volts
Maximum average forward rectified current (SEE FIG.1)		$I_{(AV)}$	1.0				Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)		I_{FSM}	30				Amps
Maximum instantaneous forward voltage at 1.0 A (NOTE 1)		V_F	0.50		0.70	0.85	Volts
Maximum DC reverse current at rated DC blocking voltage (NOTE 1)	T_A=25°C	I_R	0.5				mA
	T_A=100°C		10		5.0		
Typical thermal resistance (NOTE 2)		$R_{\theta JA}$ $R_{\theta JL}$	88 28				°C / W
Operating junction temperature range		T_J	-65 to +125		-65 to +150		°C
Storage temperature range		T_{STG}	-65 to +150				°C

NOTES : (1) Pulse test : 300us pulse width, 1% duty cycle
(2) P.C.B. mounted with 0.2 x 0.2" (5.0 x 5.0mm) copper pad areas

RATINGS AND CHARACTERISTIC CURVES SS12 THRU SS110

FIG.1 - FORWARD CURRENT DERATING CURVE

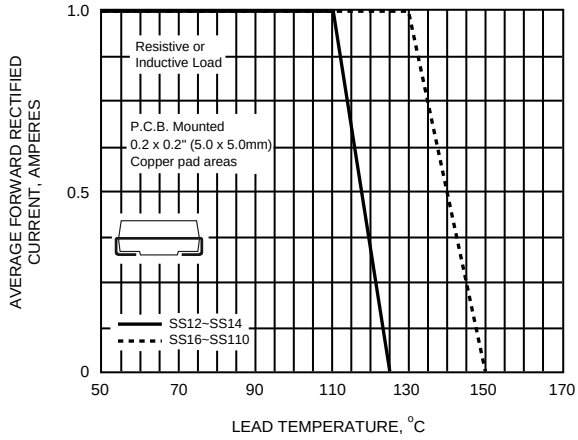


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

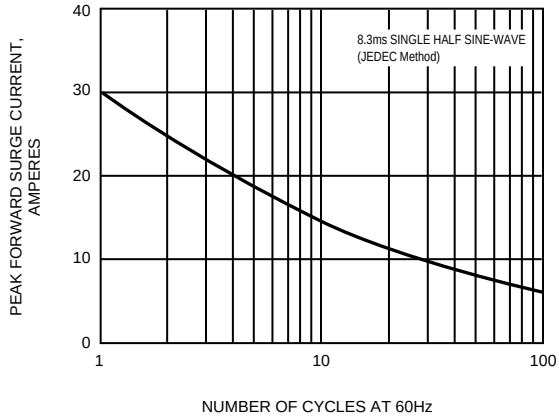


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

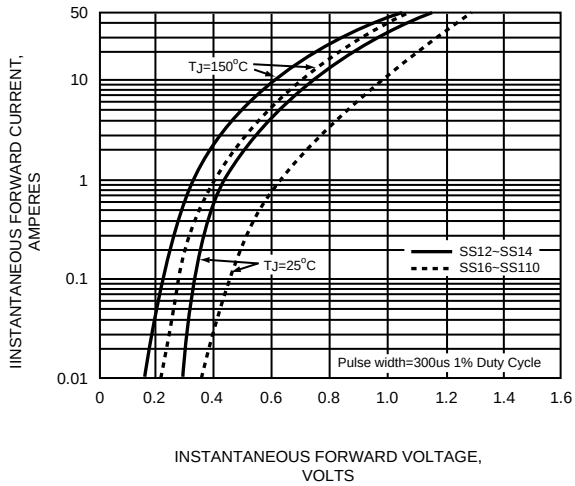


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

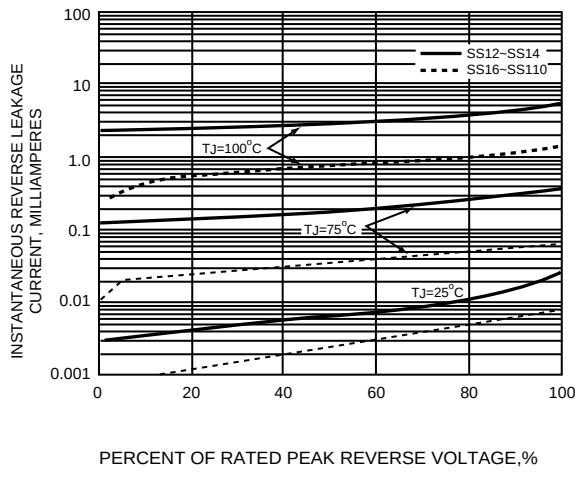


FIG.5 - TYPICAL JUNCTION CAPACITANCE