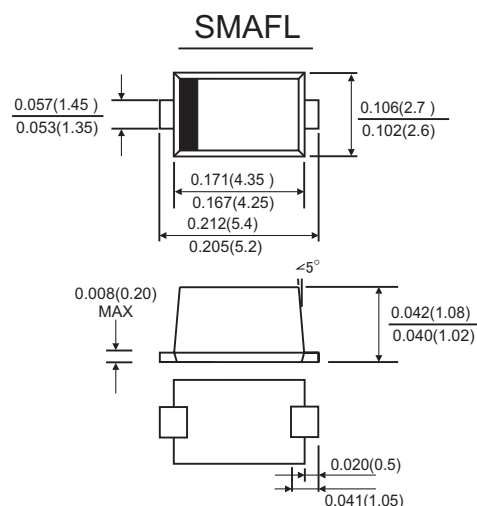


FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
 - Ultra-thin surface mounted package
 - Metal silicon junction ,majority carrier conduction
 - For surface mount applications
 - Guard ring for overvoltage protection
 - 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
 - High temperature soldering guaranteed:260°C/10 seconds at terminals
- Component in accordance to RoHS 2011/65/EU

MECHANICAL DATA

- Case: SMAFL(DO-214AC) molded plastic body
- TerMInals: Solder Plated, solderable per MIL-STD-750,method 2026
- Polarity: Color band denotes cathode end



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Ratings at 25°C ambient temperature unless otherwise specified ,Single phase ,half wave ,resistive or inductive load. For capacitive load,derate by 20%.)

		Symbols	SS 12T	SS 13T	SS 14T	SS 16T	SS 110T	SS 115T	SS 120T	Volts
Maximum repetitive peak reverse voltage		V _{RRM}	20	30	40	60	100	150	200	Volts
Maximum RMS voltage		V _{RMS}	14	21	28	42	71	105	140	Volts
Maximum DC blocking voltage		V _{DC}	20	30	40	60	100	150	200	Volts
Maximum average forward rectified current (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 at1.0 A(note 1)		V _F	0.55			0.75	0.85	0.90	0.95	Volts
Maximum instantaneous reverse current at rated DC blocking voltage(Note 1)	T _a =25°C	I _R	100				20			μA
	T =100°C		5				-			mA
	T _a =125°C		-				3			
Typical thermal resistance (Note 2)		R _{θJA} R _{θJL}	115 28.0							°C/W
Operating junction temperature range		T _J	-65 to+150							°C
Storage temperature range		T _{STG}	-65 to+150							°C

Notes: 1.Pulse test: 300μs 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 SS12T THRU SS120T

FIG.1-FORWARD CURRENT DERATING CURVE

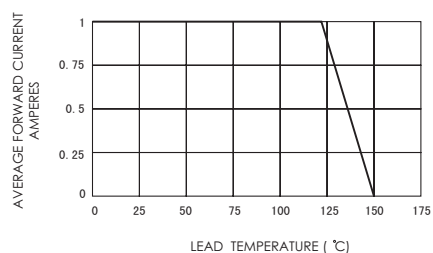


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

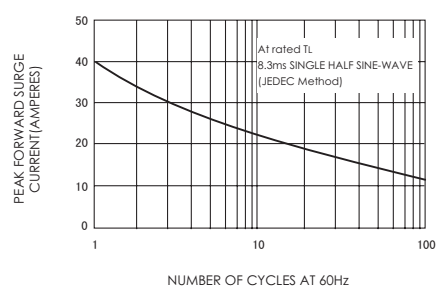


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

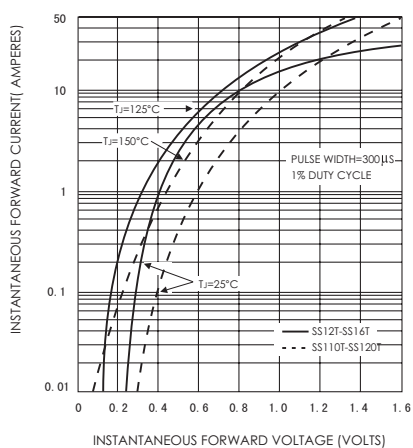


FIG.4-TYPICAL REVERSE CHARACTERISTICS

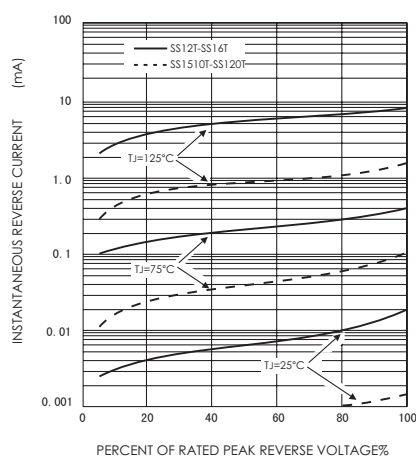


FIG.5-TYPICAL JUNCTION CAPACITANCE

