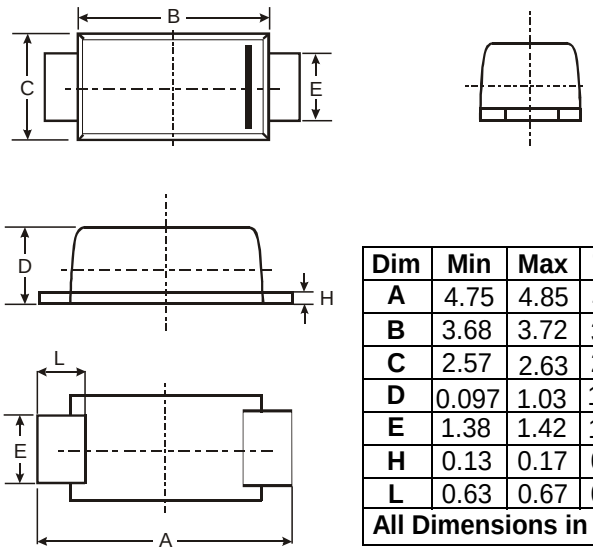
CURRENT 1.0 Ampere
VOLTAGE RANG 20 to 200 Volts

SS12F THRU SS120F

FEATURES

- For surface mounted applications
- Low profile package
- Built-in strain relief
- Low power loss, high efficiency
- Metal to silicon rectifier. majority carrier conduction
- High surge capacity
- High current capacity , low V_F
- Plastic package has Underwriters Laboratory Flammability Classification 94V-O
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- Lead free in comply with EU RoHS 2002/95/EC directives.

SMAF



Dim	Min	Max	Typ
A	4.75	4.85	4.80
B	3.68	3.72	3.70
C	2.57	2.63	2.60
D	0.097	1.03	1.00
E	1.38	1.42	1.40
H	0.13	0.17	0.15
L	0.63	0.67	0.65
All Dimensions in mm			

MECHANICAL DATA

- Case: SMAF molded plastic
- Terminals: Solder plated, solderable per MIL-STD-750,Method 2026
- Polarity : Color band denotes cathode end

Approx. Weight:0.0011 ounces, 0.0628 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ 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	SS115	SS120	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 T_A=25℃	I_R	0.5							0.2		mA
at rated DC blocking voltage T_A=100℃		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

NOTES : 1. Mounted on an FR4 PCB, single-sided copper, with 48cm^2 copper pad area
2. Mounted on an FR4 PCB, single-sided copper, mini pad.

CURRENT 1.0 Ampere
VOLTAGE RANG 20 to 200 Volts

SS12F THRU SS120F

RATING AND CHRACTERISTIC CURVES SS12 Thru SS120

FIG. 1- FORWARD CURRENT DERATING CURVE

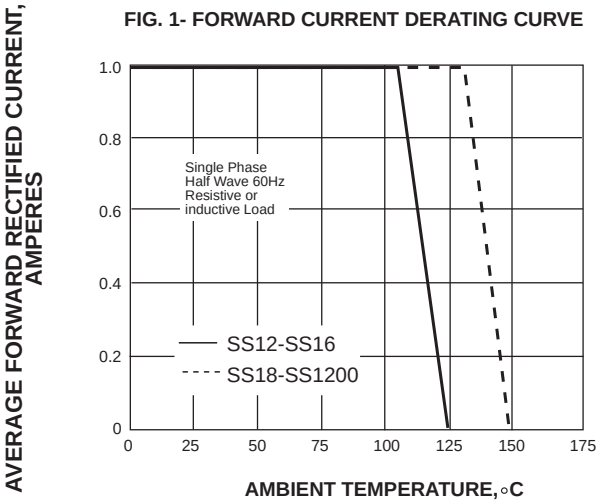


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

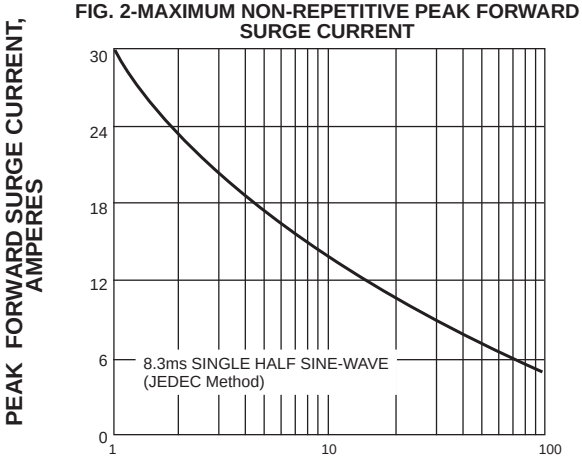


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

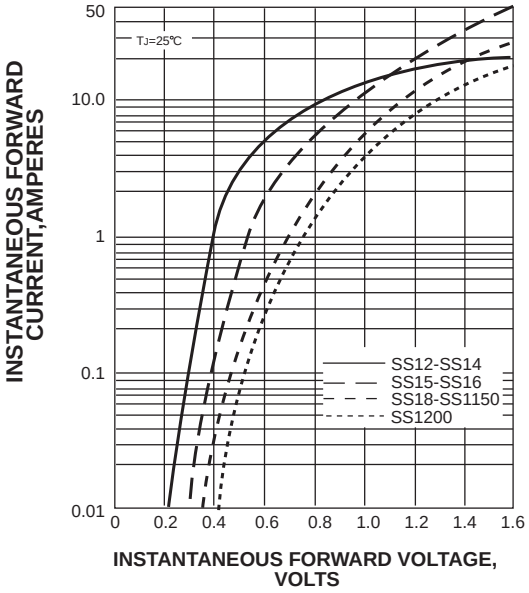


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

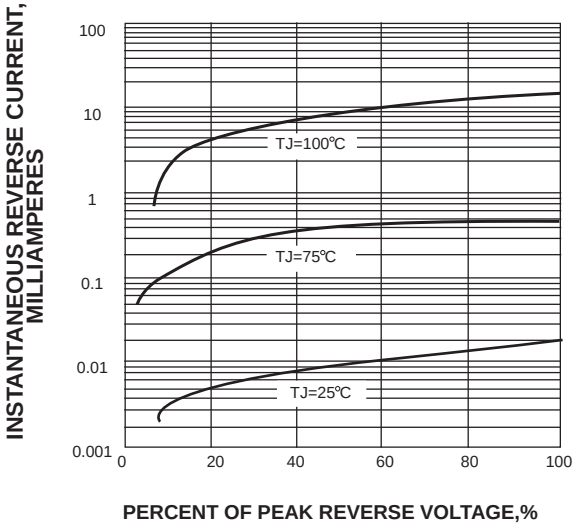


FIG. 5-TYPICAL JUNCTION CAPACITANCE

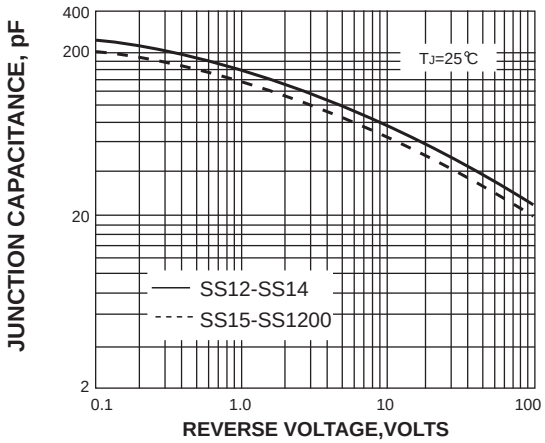


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE

