



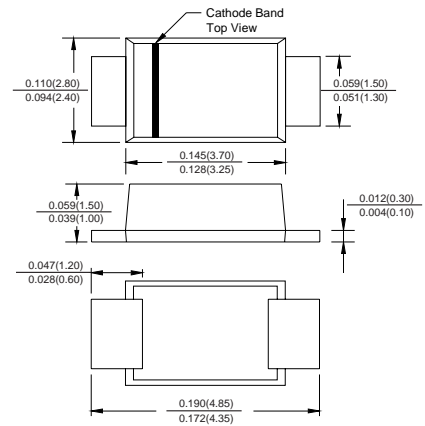
SMAF

FEATURES

- ✧ Schottky barrier rectifier
- ✧ Guarding protection
- ✧ Low forward voltage
- ✧ Reverse energy tested
- ✧ High current capability
- ✧ Extremely low thermal resistance
- ✧ This product not contains Antimony and Bromine compounds

MECHANICAL DATA

- ✧ Case: SMAFL molded plastic body
- ✧ Polarity: Color band denotes cathode end
- ✧ Mounting position: ANY



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

Parameter	SYMBOL	SS 32AF	SS 33AF	SS 34AF	SS 35AF	SS 36AF	SS 38AF	SS 39AF	SS 310AF	SS 315AF	SS 320AF	UNITS
Marking code		SS32F	SS33F	SS34F	SS35F	SS36F	SS38F	SS39F	SS310F	SS315F	SS320F	
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	90	100	150	200	V
Maximum RMS voltage	V_{RWS}	14	21	28	35	42	56	63	70	105	140	V
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	90	100	150	200	V
Maximum average forward rectified current (see fig1)	$I_{F(AV)}$	3										A
Peak forward surge current 8.3ms half-sine-wave superimposed on rated load(JEDEC method)	I_{FSM}	100					80					A
I^2t Rating for Fusing($t < 8.3ms$)	I^2t	41.5					20.335					A^2s
Maximun Forward Voltage @ $I_{F(AV)}$ (Pulse test:300 μs pulse width,1% duty cycle)	V_F	0.55			0.70		0.85					V
Maximun DC Reverse current @Rated DC Blocking Voltage (Pulse test:Pulse width 40ms)	T=25°C	I_R					100					μA
	T=100°C	I_R					-					mA
	T=125°C	I_R					5					mA
Typical Thermal Resistance (Device mounted on PCB with 10mm×20mm×0.1mm copper pad area)	$R_{\theta JA}$	78										°C/W
	$R_{\theta JC}$	18										
	$R_{\theta JL}$	20										
Junction temperature range	T_J	-55~150					-55~175					°C
Storage temperature range	T_{STG}	-55~150					-55~175					°C

RATINGS AND CHARACTERISTIC CURVES (SS32A THRU SS320A)

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

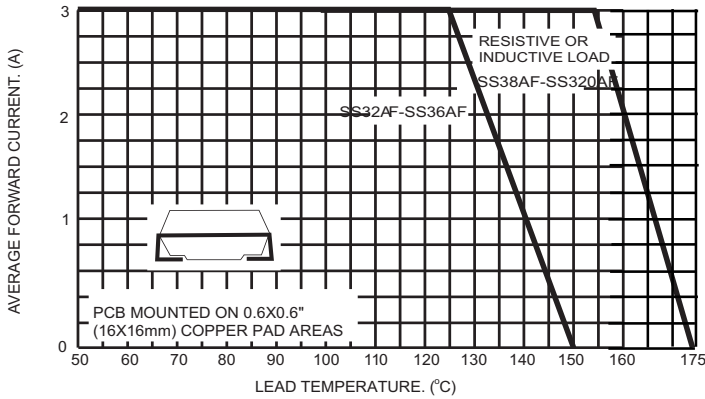


FIG.2- MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

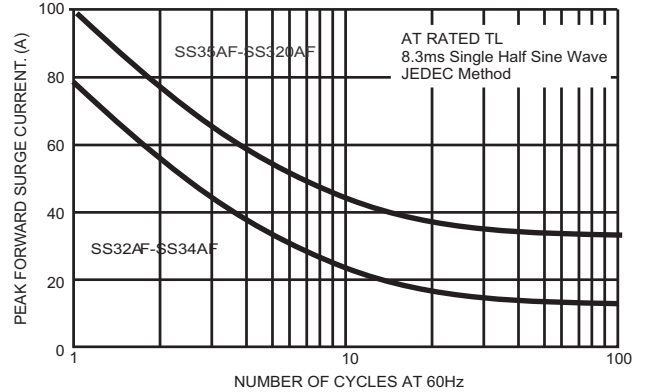


FIG.3- TYPICAL FORWARD CHARACTERISTICS

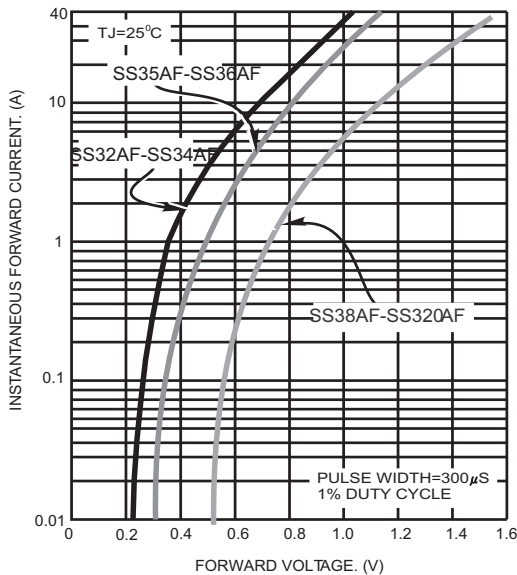


FIG.4- TYPICAL REVERSE CHARACTERISTICS

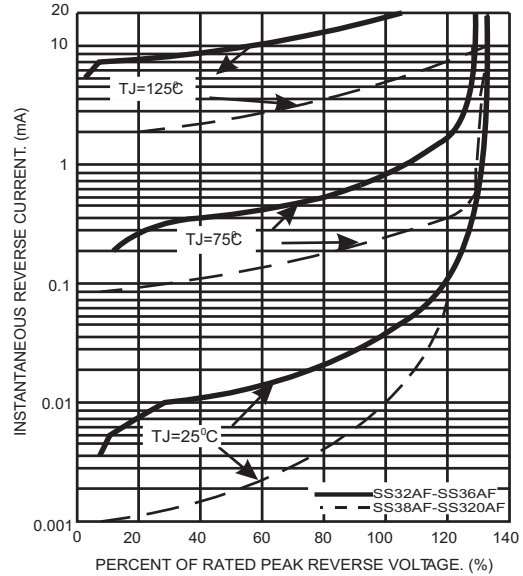


FIG.5- TYPICAL JUNCTION CAPACITANCE

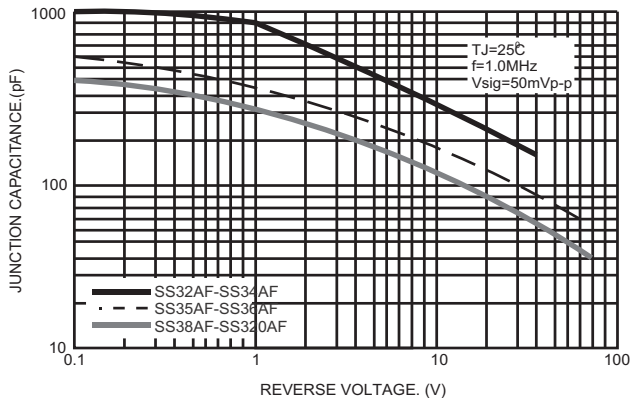
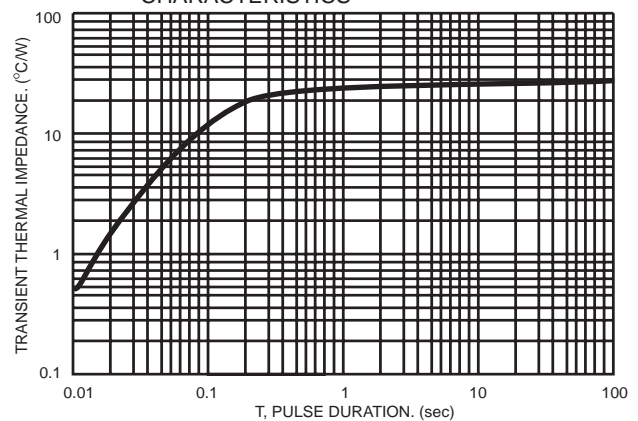


FIG.6- TYPICAL TRANSIENT THERMAL CHARACTERISTICS



PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SMAF	3000/REEL	120000	30.5X30.5X42.5	12.00	11.00
PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SMAF	5000/REEL	100000	30.5X30.5X42.5	10.00	9.00