

FEATURES

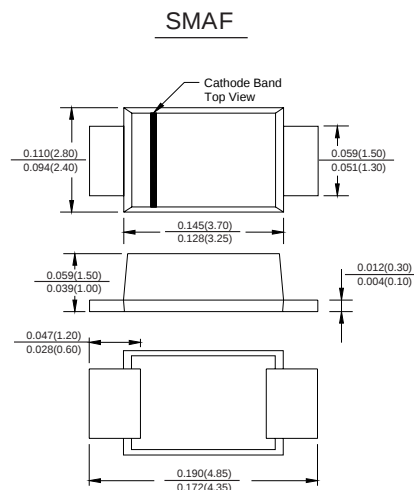
- ✧ Schottky barrier rectifier
- ✧ Guarding protection
- ✧ Low forward voltage
- ✧ Reverse energy tested
- ✧ High current capability
- ✧ Extremely low thermal resistance

MECHANICAL DATA

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

Maximum Ratings (@TA = 25°C unless otherwise specified)

Dimensions in inches and (millimeters)



Characteristic	Symbol	SS12FA	SS13FA	SS14FA	SS15FA	SS16FA	SS18FA	SS19FA	SS110FA	UNITS
Device marking code		SS12	SS13	SS14	SS15	SS16	SS18	SS19	SS110	
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	90	100	V
Maximum RMS voltage	V_{RWS}	14	21	28	35	42	56	63	70	V
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	90	100	V
Maximum average forward rectified current at $T_L=90^\circ\text{C}$	$I_{F(AV)}$	1.0								A
Peak forward surge current 8.3ms single half-sine-wave	I_{FSM}	40								A

Thermal Characteristics

Characteristic	Symbol	SS12FA	SS13FA	SS14FA	SS15FA	SS16FA	SS18FA	SS19FA	SS110FA	UNITS
Maximum thermal resistance	R _{θJL}	28								°C/W
Operating temperature range	T _J	-55 ---- +125						-55 ---- +150		°C
Storage temperature range	T _{STG}	-55 ---- +150								°C

Electrical Characteristics (@TA = 25°C unless otherwise specified)

Characteristic	Symbol	SS12FA	SS13FA	SS14FA	SS15FA	SS16FA	SS18FA	SS19FA	SS110FA	UNITS
Maximum instantaneous forward voltage at I _{FM} =1.0A	V _F	0.50			0.75		0.85			V
Maximum DC reverse current T _J =25°C at rated DC blocking voltage T _J =125°C	I _R	0.2					0.5			m A
		6.0			5.0					

FIG.1 – FORWARD DERATING CURVE

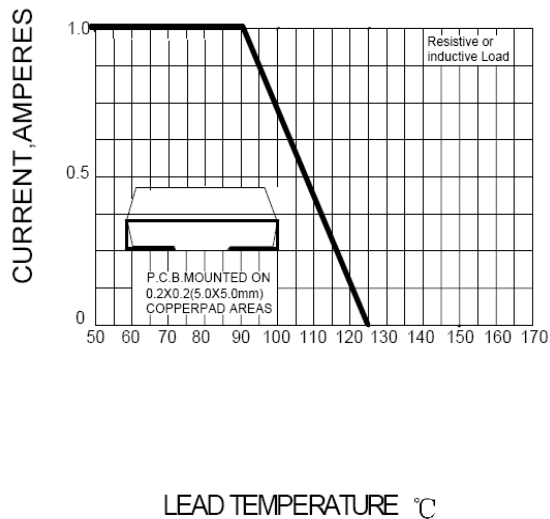


FIG.2– PEAK FORWARD SURGE CURRENT

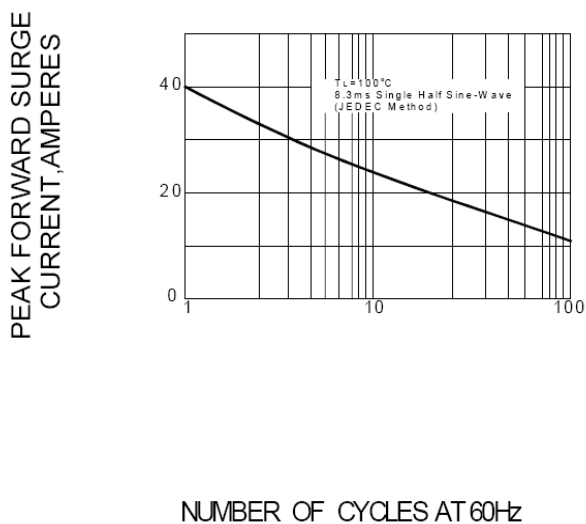


FIG.3 – TYPICAL FORWARD CHARACTERISTICS

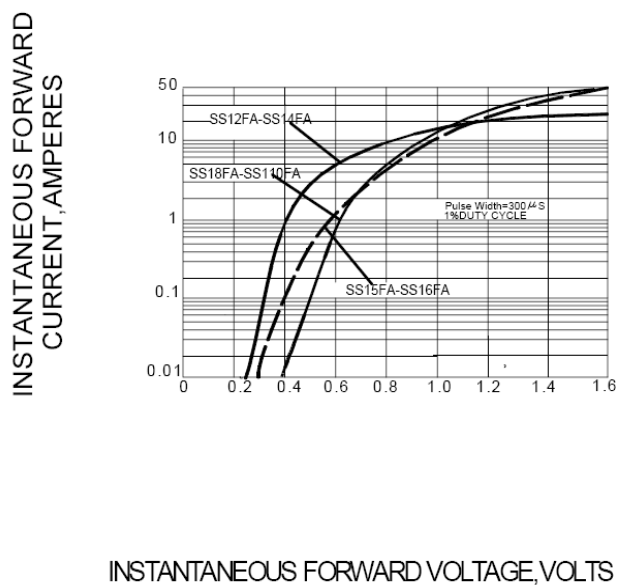
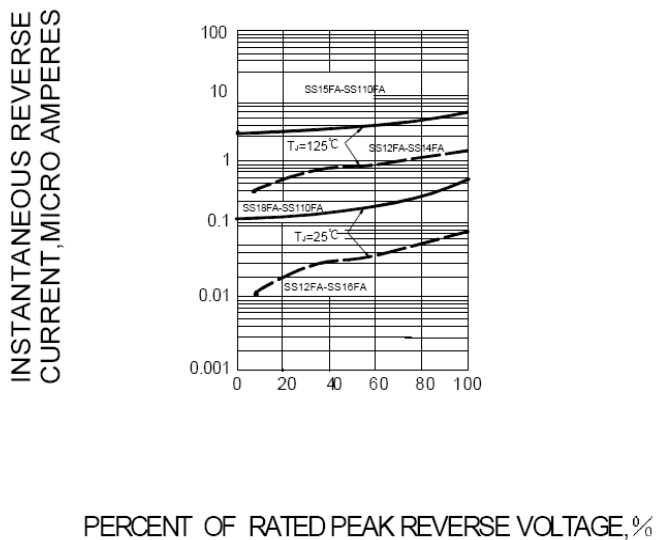


FIG.4 – TYPICAL REVERSE CHARACTERISTICS



PACKAGE	SPQ/PCS	CARTON SPQ/PCS	CARTON SIZE/CM	CARTON GW/KG	CARTON NW/KG
SMAF	3000/REEL	80000	36X30.6X31	12.00	11.00