



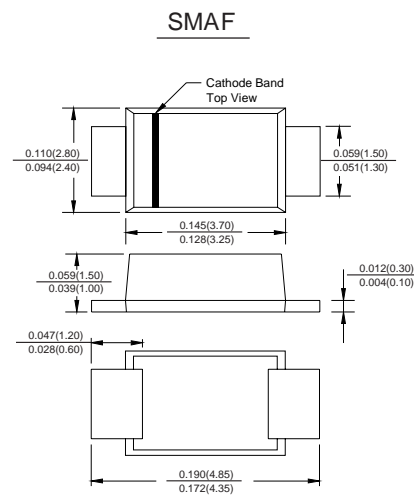
FEATURES

- ✧ 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)



Characteristic	Symbol	SS12 AF	SS13 AF	SS14 AF	SS15 AF	SS16 AF	SS18 AF	SS19 AF	SS11 FAF	SS115 AF	SS120 AF	UNITS
Device marking code		SS12F	SS13F	SS14F	SS15F	SS16F	SS18F	SS19F	SS110	SS115F	SS120F	
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	150	V
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	90	100	150	200	V
Maximum average forward rectified	$I_{F(AV)}$	1.0										A
Peak forward surge current 8.3ms single half-sine-wave	I_{FSM}	40										A

Thermal Characteristics

Characteristic	Symbol	SS12 AF	SS13 AF	SS14 AF	SS15 AF	SS16 AF	SS18 AF	SS19 AF	SS110 AF	SS115 AF	SS120 AF	UNITS
Maximum thermal resistance	$R_{\theta JL}$	28										°C/W
Operating temperature range	T_J	-55 ---- +150					-55 to +175					°C
Storage temperature range	T_{STG}	-55 ---- +150					-55 to +175					°C

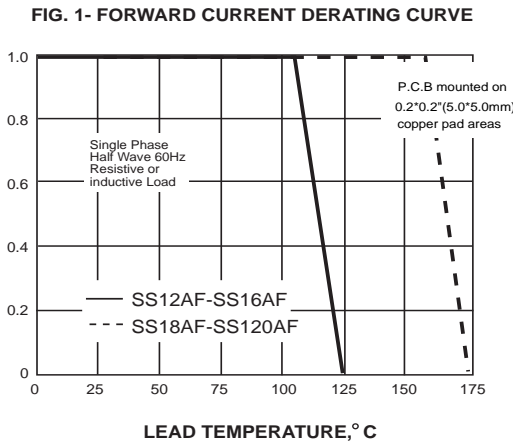
Electrical Characteristics (@TA = 25°C unless otherwise specified)

Characteristic	Symbol	SS12 AF	SS13 AF	SS14 AF	SS15 AF	SS16 AF	SS18 AF	SS19 AF	SS110 AF	SS115 AF	SS120 AF	UNITS
Maximum instantaneous forward voltage at $I_{FM}=1.0A$	V_F	0.55			0.70		0.85			0.95		V
Maximum DC reverse current $T_J=25^\circ C$ at rated DC blocking voltage $T_J=125^\circ C$	I_R	0.2			0.5			5.0			m A	
		6.0			5.0							

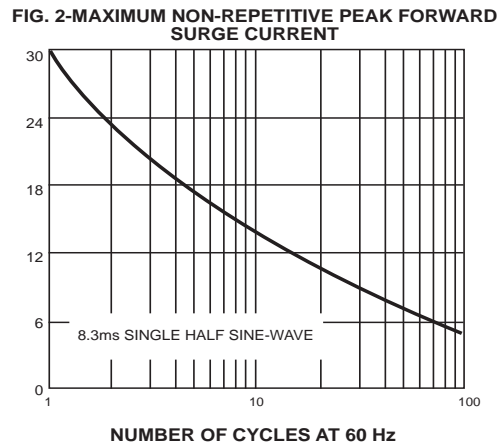


Ratings and Characteristics Curve(TA=25°C unless otherwise noted)

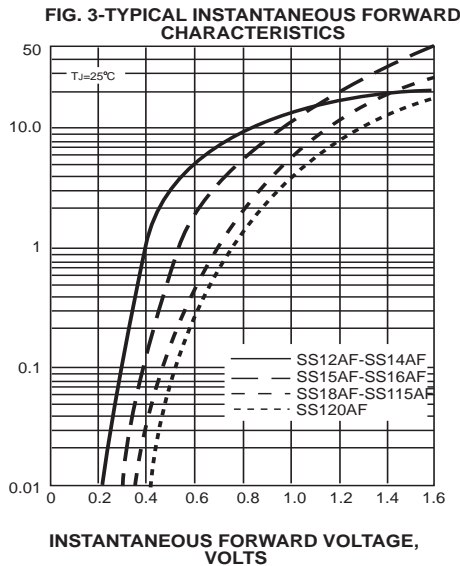
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES



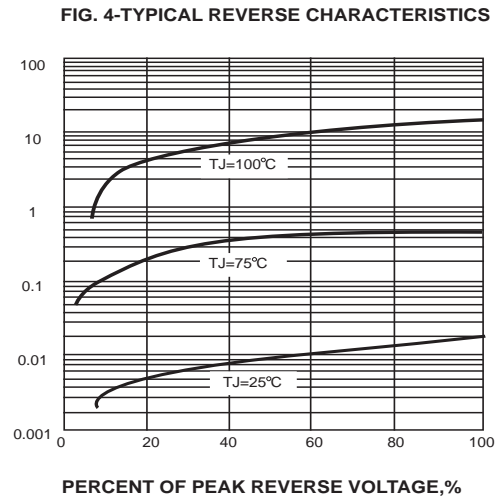
PEAK FORWARD SURGE CURRENT, AMPERES



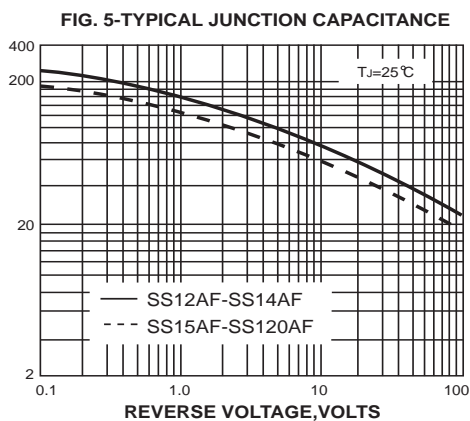
INSTANTANEOUS FORWARD CURRENT, AMPERES



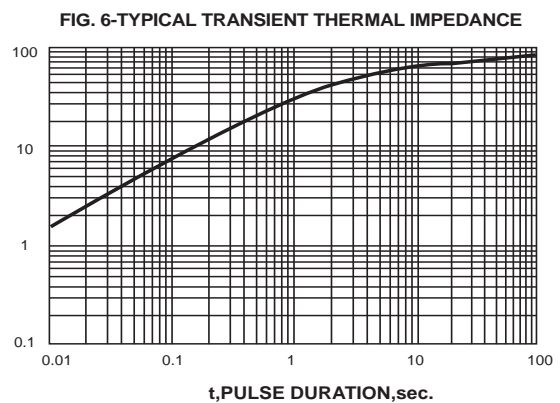
INSTANTANEOUS REVERSE CURRENT, MILLIAMPERES



JUNCTION CAPACITANCE, pF



TRANSIENT THERMAL IMPEDANCE, °C/W



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