

Features

- $I_{F(AV)}$ 1A
- V_{RRM} 20V-200V
- High surge current capability
- Polarity: Color band denotes cathode



Applications

- Rectifier

Marking

- SS1X

X : From 2 To 20

SMAF top view

Schematic diagram



Halogen-Free

Limiting Values(Absolute Maximum Rating)

Symbol	Parameter	Conditions	SS1									Unit
			2F	3F	4F	5F	6F	8F	10F	15F	20F	
V _{RRM}	Maximum Repetitive Peak Reverse Voltage		20	30	40	50	60	80	100	150	200	V
V _{RMS}	Maximum RMS voltage		14	21	28	35	42	56	70	105	140	V
I _{F(AV)}	Average Forward Current	60Hz Half-sine wave Resistance load	1.0									A
I _{FSM}	Surge(Non-repetitive)Forward Current	60Hz Half-sine wave, 1 cycle, T _a =25℃	30									A
T _j	Junction Temperature		-55~+125			-55~+150						℃
T _{stg}	Storage Temperature		-55~+150									℃

Electrical Characteristics (T=25°C Unless otherwise specified)

Symbol	Parameter	Conditions	SS1								Unit
			2F	3F	4F	5F	6F	8F	10F	15F	
V _F	Peak Forward Voltage	I _F =1.0A	0.55		0.70		0.85		0.95		V
I _{RRM1}	Peak Reverse Curren	V _{RM} =V _{RRM} T _a =25℃	0.5				0.1				mA
I _{RRM2}		V _{RM} =V _{RRM} T _a =100℃	10				5.0				
R _{θJ-A}	Thermal	Between junction and ambient	81								A
R _{θJ-L}	Resistance(Typical)	Between junction and terminal	9.5								A
C _J	Juction Capacitance (Typical)	Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C	40		30		26		20		℃

Notes:

Thermal resistance from junction to ambient and from junction to lead mounted on FR4 PCB double sided copper mini pad

Typical Characteristics

FIG. 1: FORWARD CURRENT DERATING CURVE

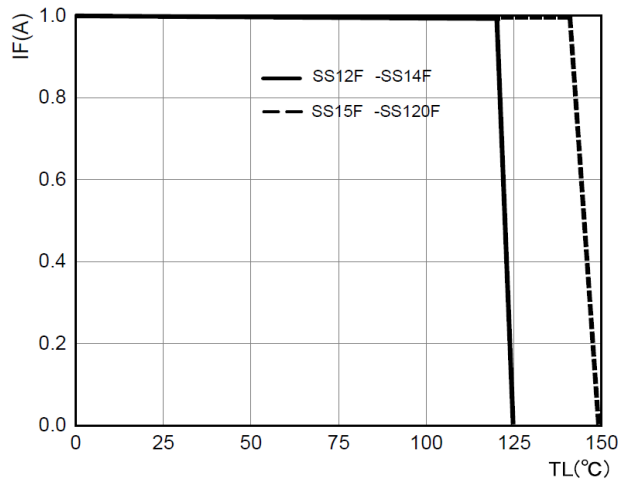
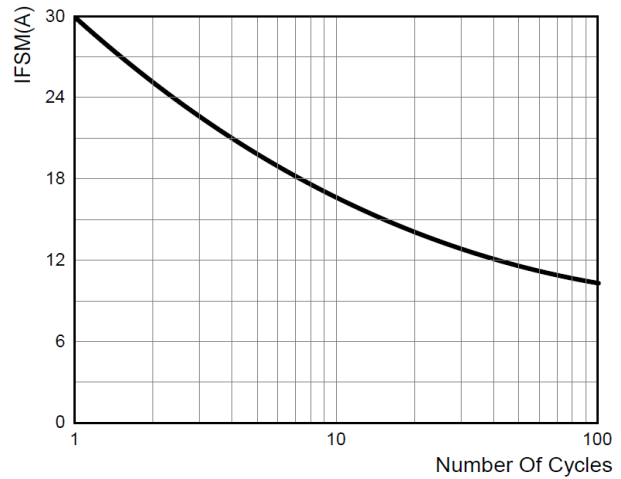
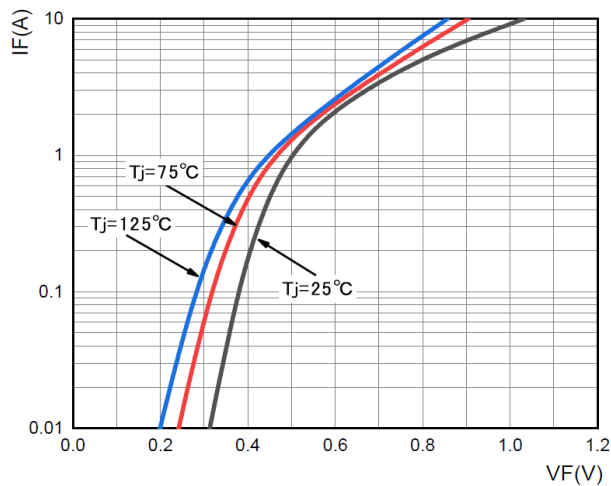


FIG. 2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



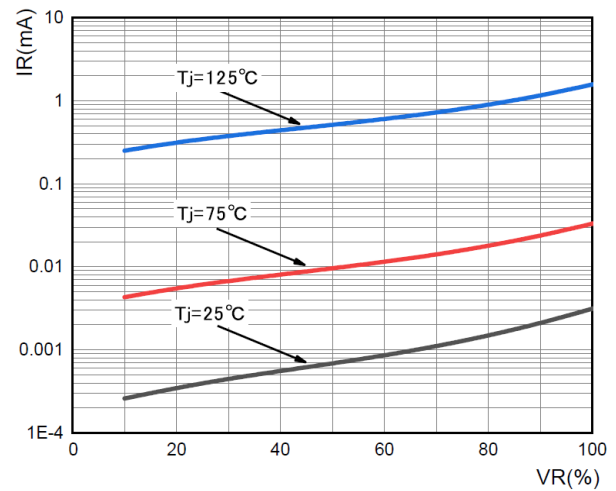
SS12F-SS14F

FIG.3: TYPICAL FORWARD CHARACTERISTICS



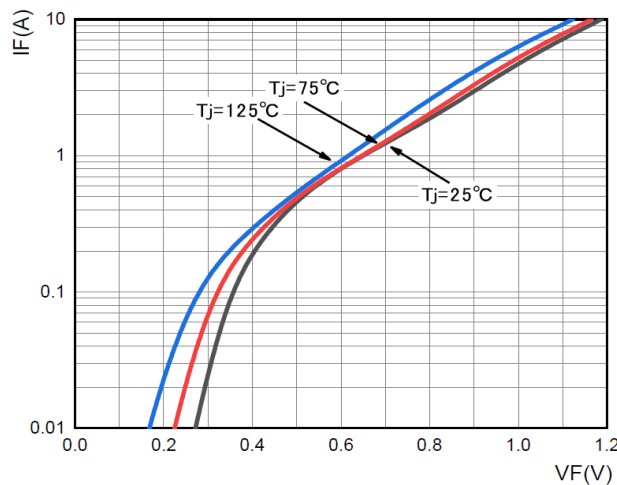
SS12F-SS14F

FIG.4: TYPICAL REVERSE CHARACTERISTICS



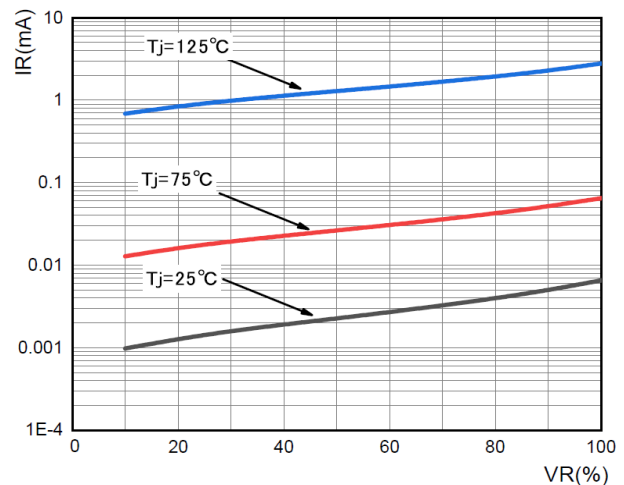
SS15F-SS16F

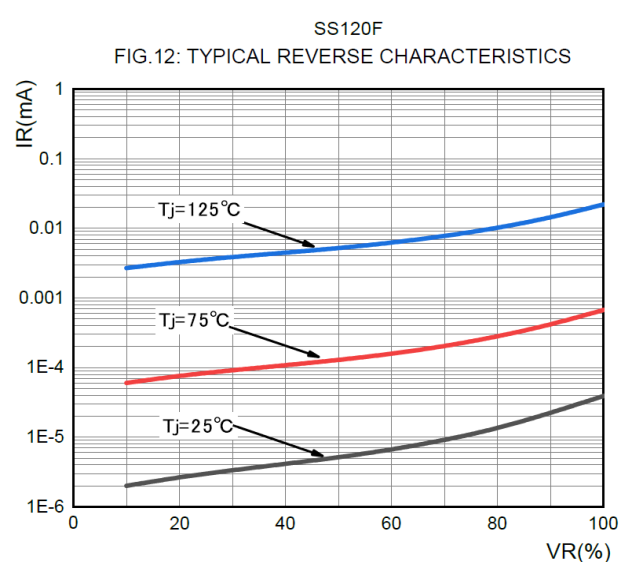
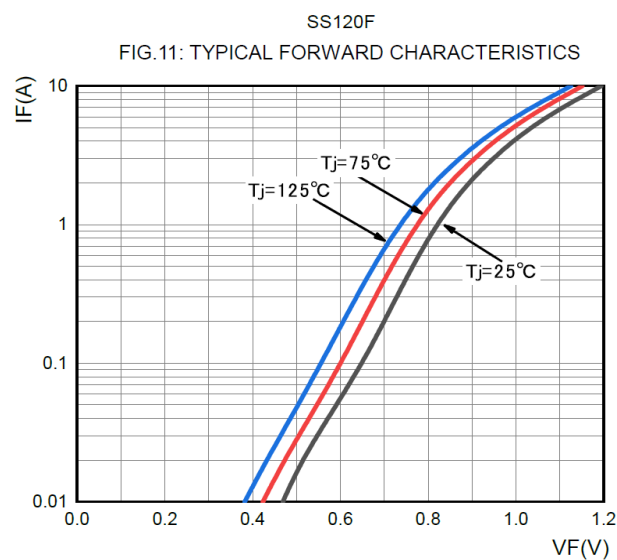
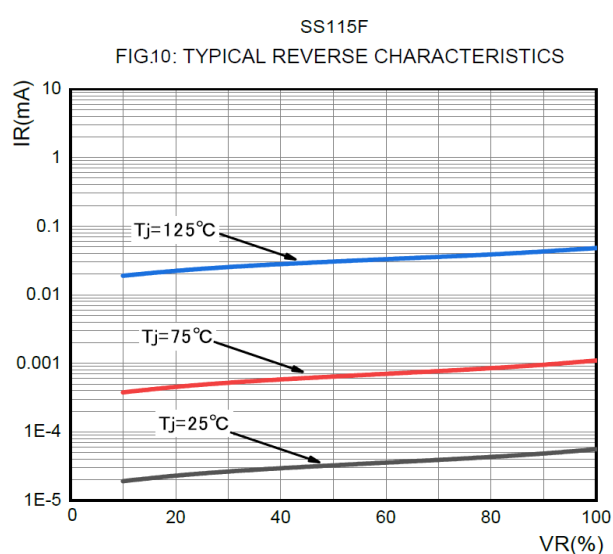
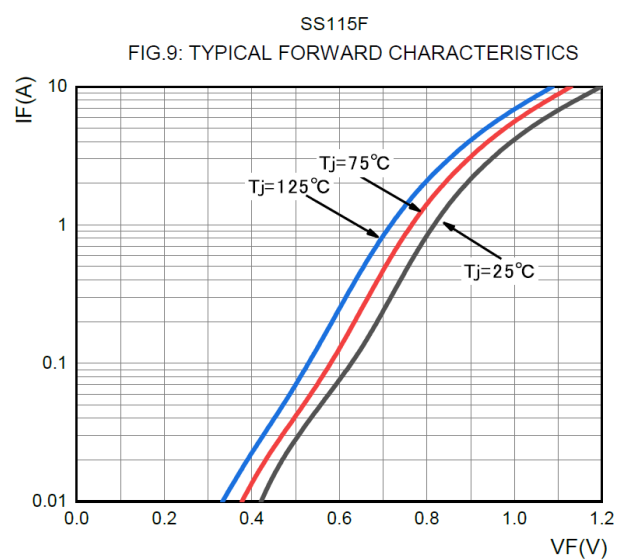
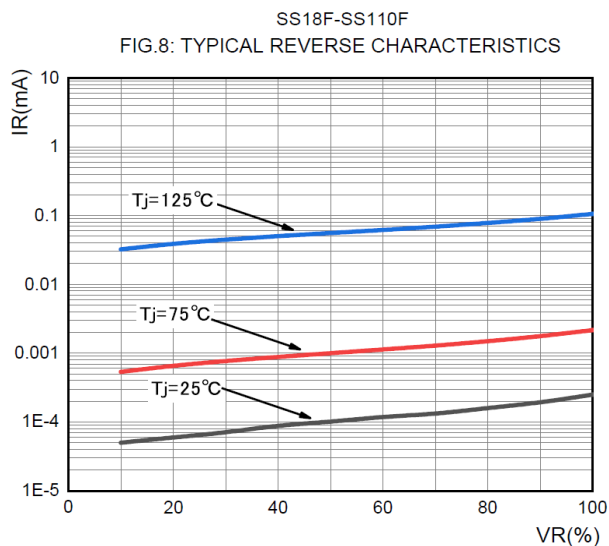
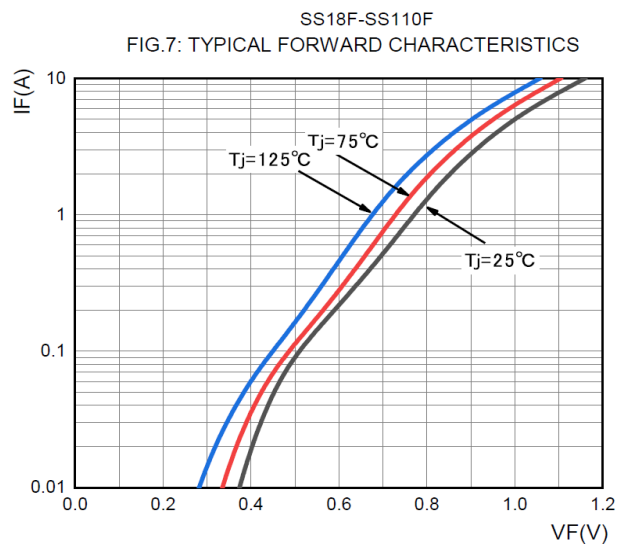
FIG.5: TYPICAL FORWARD CHARACTERISTICS



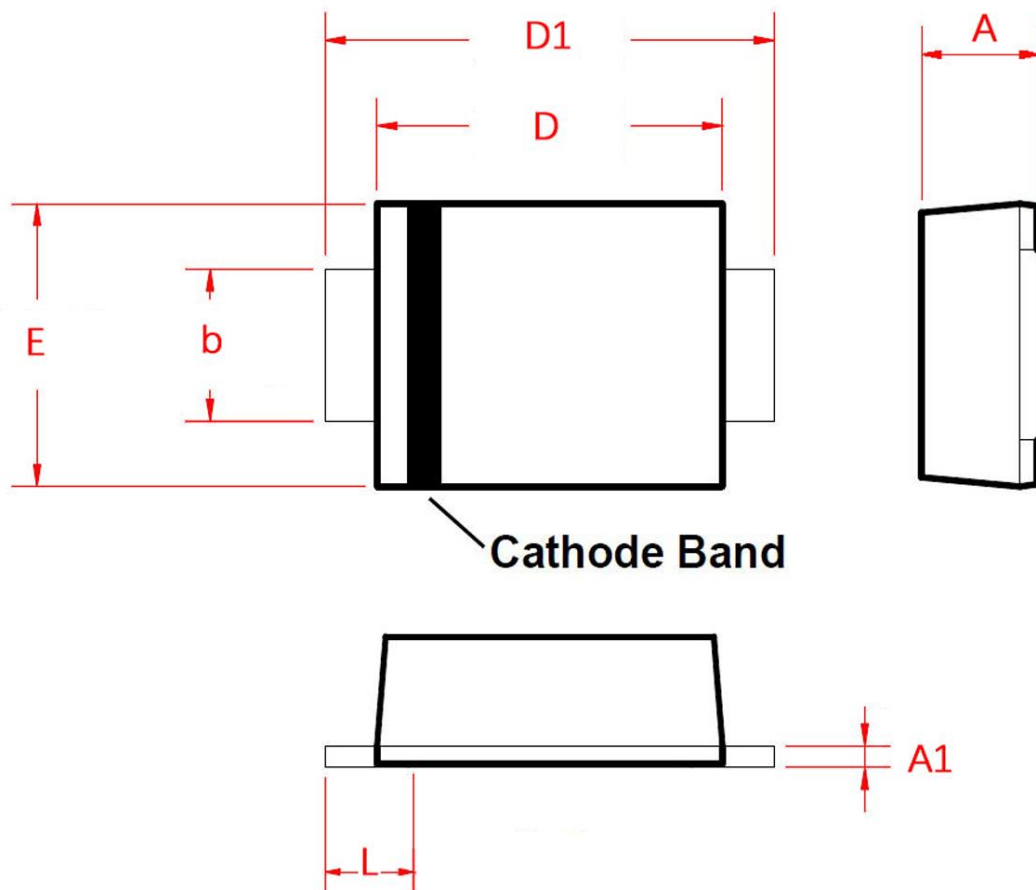
SS15F-SS16F

FIG.6: TYPICAL REVERSE CHARACTERISTICS





SMAF Package information



Symbol	Dimensions in Millimeters(mm)		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.200	0.035	0.047
A1	0.120	0.180	0.005	0.007
b	1.300	1.600	0.051	0.063
D	3.300	3.700	0.130	0.146
D1	4.400	4.900	0.173	0.193
E	2.400	2.700	0.094	0.106
L	0.800	1.300	0.031	0.051