

**CSD12SMAF
THRU CSD120SMAF**

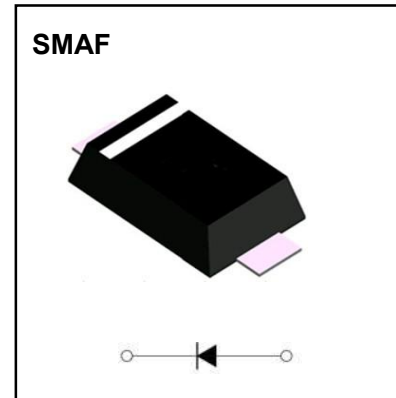
Schottky Rectifier Diodes

Features

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

Applications

- Rectifier



Limiting Values(Absolute Maximum Rating)

Item	Symbol	Unit	Test Conditions	CSD1									
				2	3	4	5	6	8	10	15	20	
Repetitive Peak Reverse Voltage	V_{RRM}	V		20	30	40	50	60	80	100	150	200	
Maximum RMS Voltage	V_{RMS}	V		14	21	28	35	42	56	70	105	140	
Average Forward Current	$I_{F(AV)}$	A	60Hz Half-sine wave , Resistance load , TL(Fig.1)	1.0									
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave , 1 cycle , $T_a=25^{\circ}C$	30									
Junction Temperature	T_J	$^{\circ}C$		-55~+125				-55~+150					
Storage Temperature	T_{STG}	$^{\circ}C$		-55 ~ +150									

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

Item	Symbol	Unit	Test Condition	CSD1									
				2	3	4	5	6	8	10	15	20	
Peak Forward Voltage	V_F	V	$I_F=1.0A$	0.55		0.70		0.85		0.95			
Peak Reverse Current	I_{RRM1}	mA	$V_{RM}=V_{RRM}$	$T_a =25^{\circ}C$		0.5		0.1					
	I_{RRM2}			$T_a =100^{\circ}C$		10		5.0					
Thermal Resistance(Typical)	$R_{\theta J-A}$	$^{\circ}C/W$	Between junction and ambient	88									
	$R_{\theta J-L}$		Between junction and terminal	28									

Notes:

Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

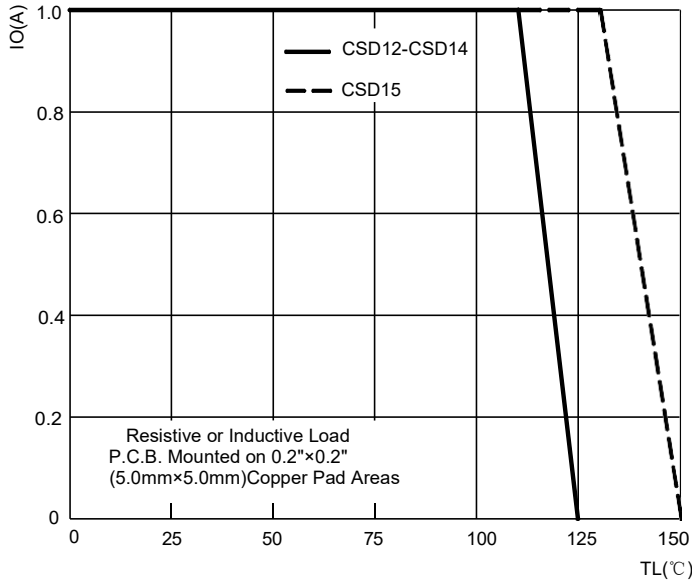


FIG2: Surge Forward Current Capadity

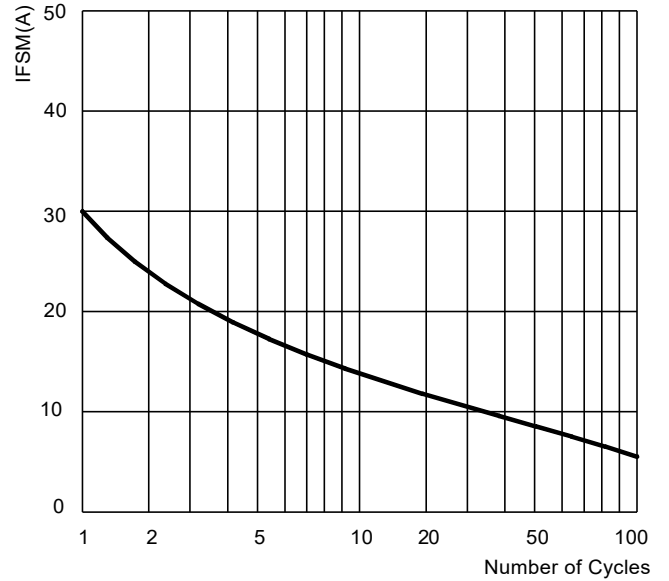


FIG.3: TYPICAL FORWARD CHARACTERISTICS

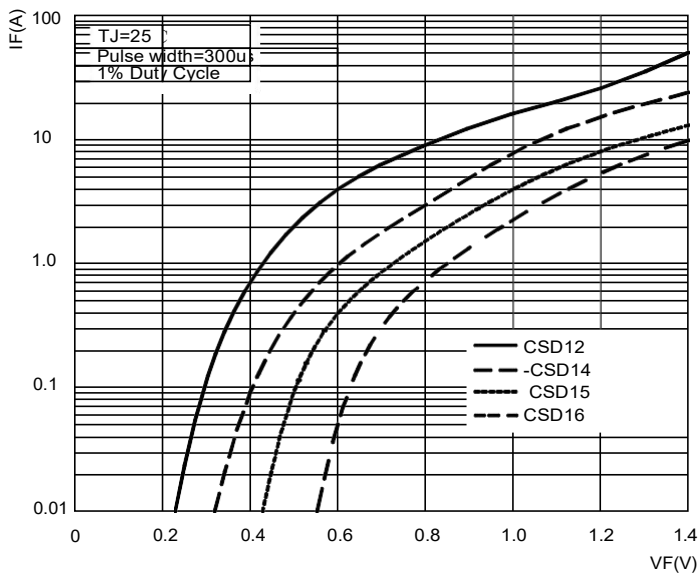
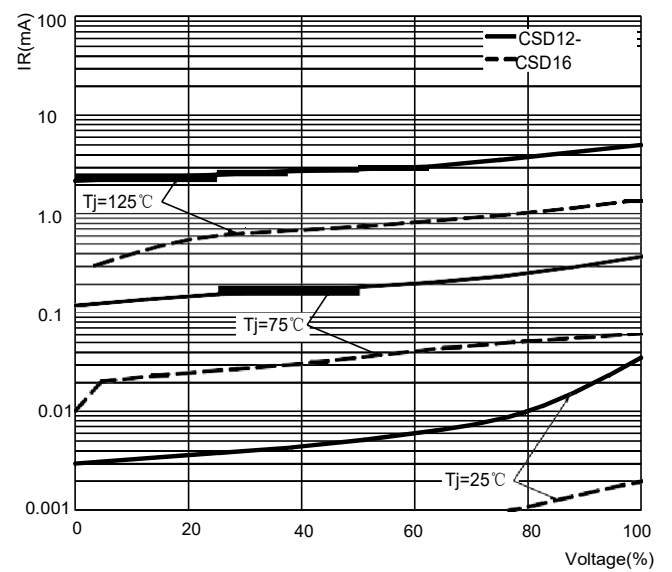
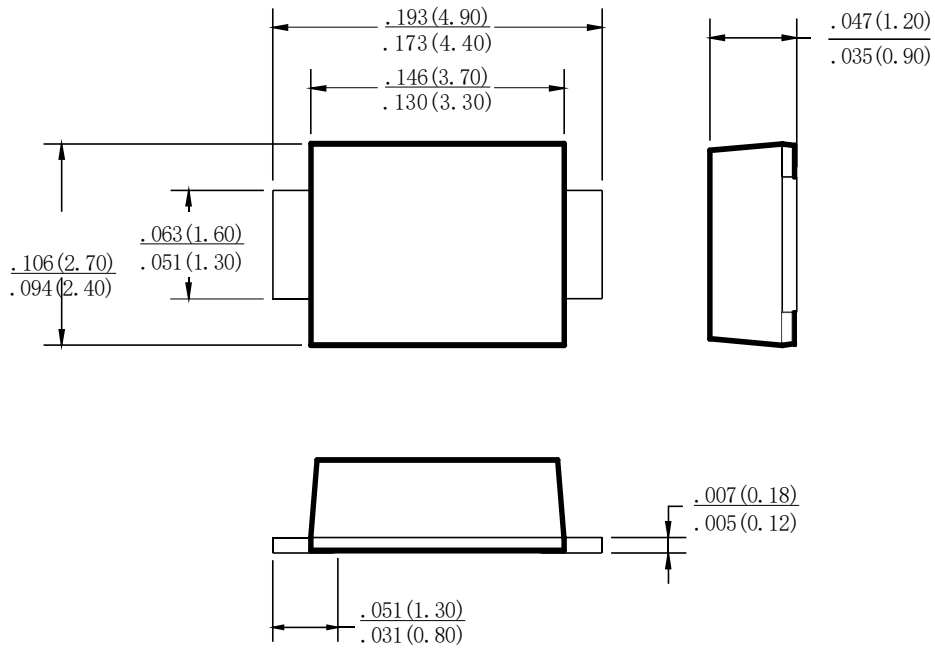


FIG.4: TYPICAL REVERSE CHARACTERISTICS

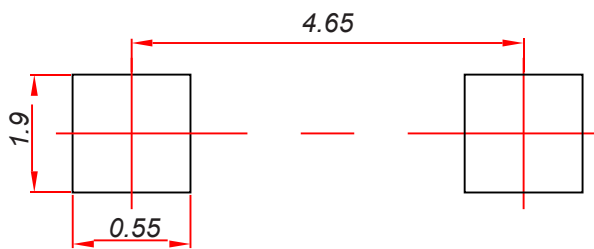


SMAF Package Outline Dimensions



Dimensions in inches and (millimeters)

SMAF Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.

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