

CSD12SMAF THRU CSD120SMAF

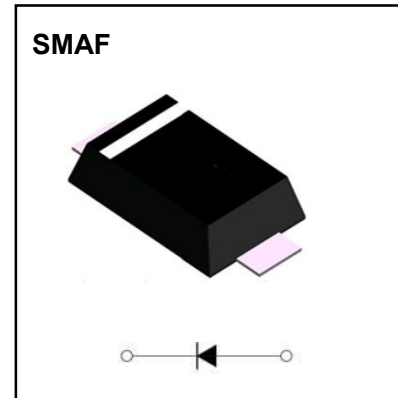
Schottky Rectifier Diodes

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								
				2F	3F	4F	5F	6F	8F	10F	15F	20F
Repetitive Peak Reverse Voltage	V _{RRM}	V		20	30	40	50	60	80	100	50	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 , Ta=25℃	30								
Junction Temperature	T _J	℃		-55~+125				-55~+150				
Storage Temperature	T _{STG}	℃		-55~+150								

Electrical Characteristics ($T = 25^{\circ}C$ Unless 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℃	0.5				0.1				
	T _a =100℃			10		5.0							
Thermal Resistance(Typical)	R _{θJ-A}	℃/ W	Between junction and ambient		88								
	R _{θJ-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

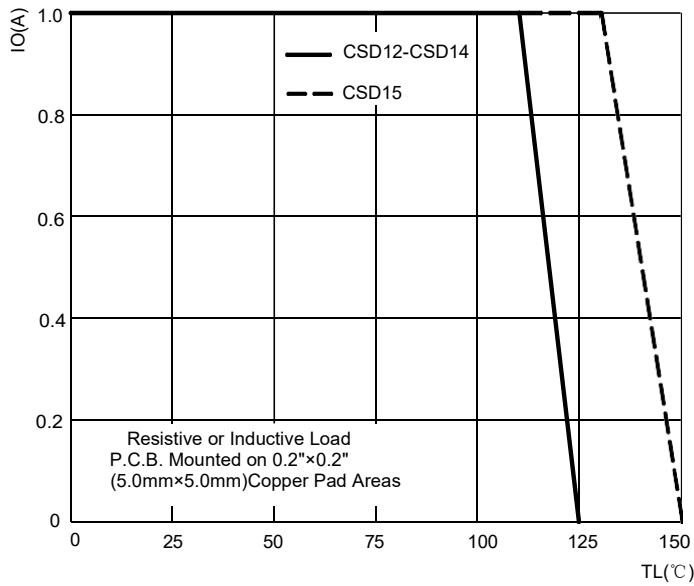


FIG2: Surge Forward Current Capability

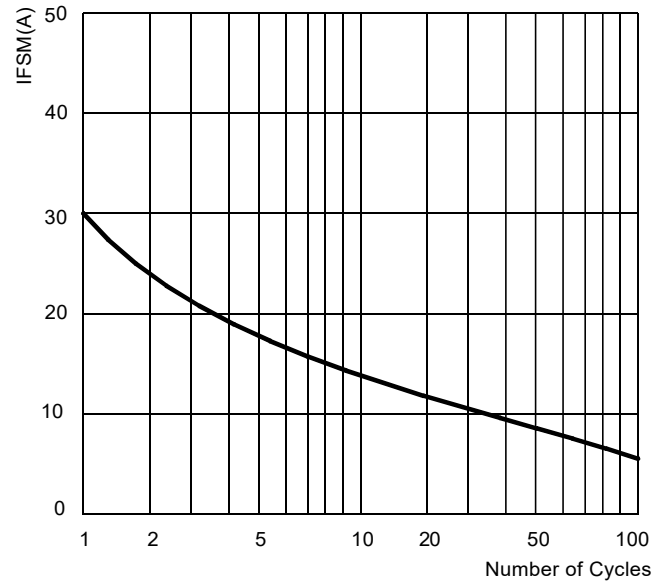


FIG.3: TYPICAL FORWARD CHARACTERISTICS

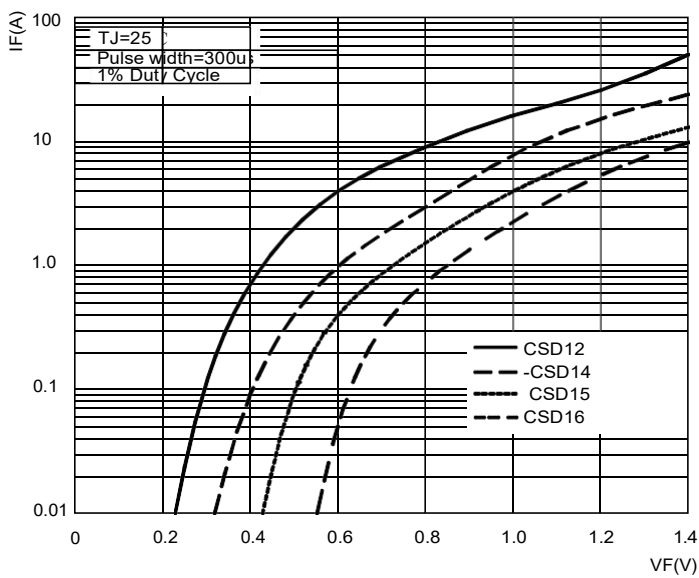
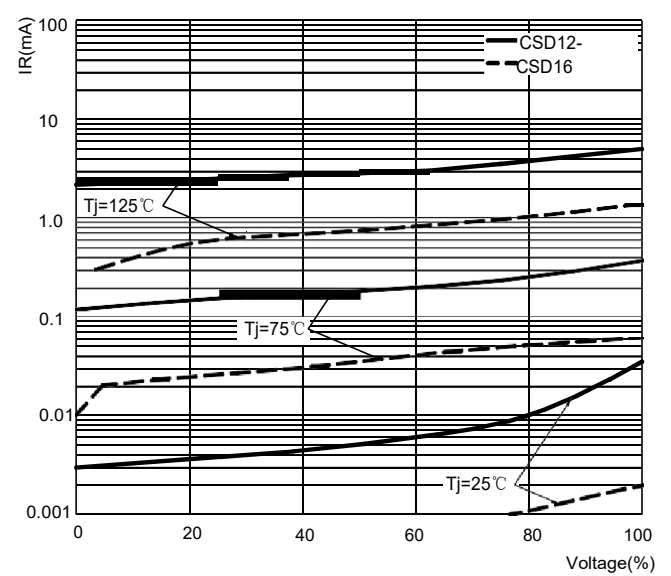
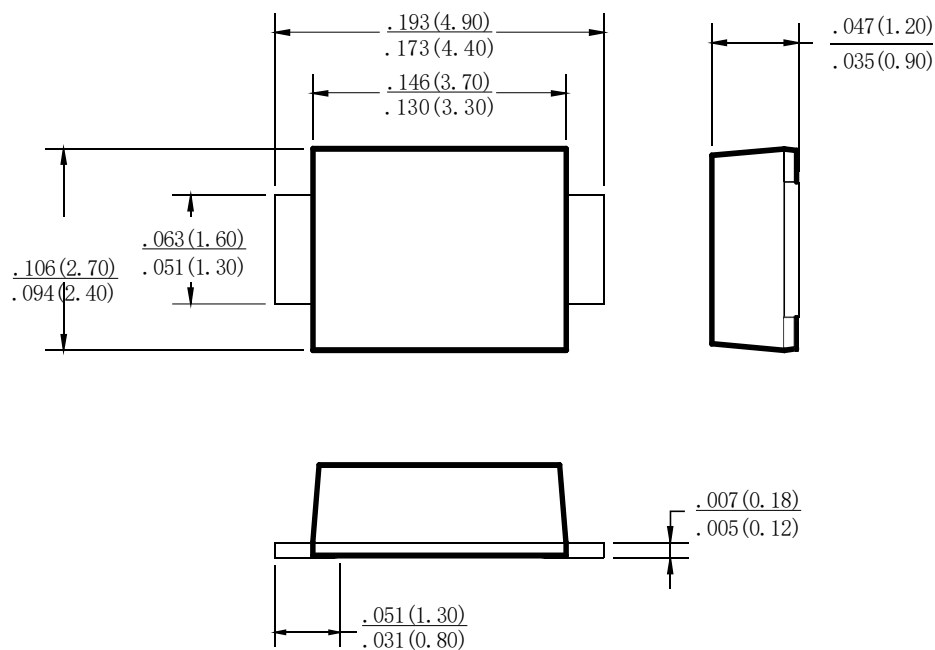


FIG.4: TYPICAL REVERSE CHARACTERISTICS

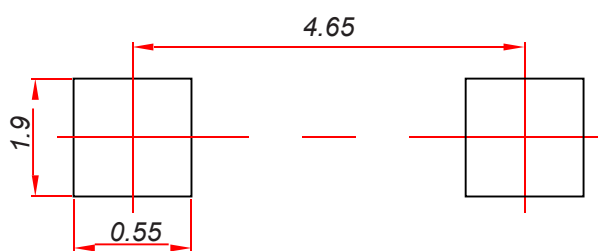


SMAF Package Outline Dimensions



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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