

CSD52F THRU CSD520F

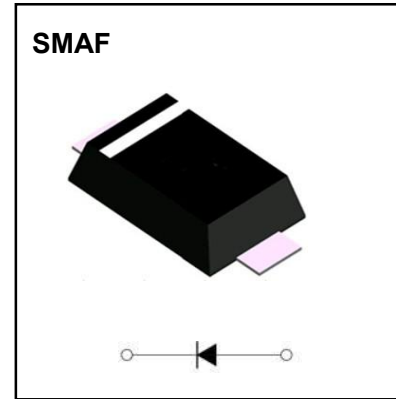
Schottky Rectifier Diodes

Features

- $I_{F(AV)}$ 5A
- 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	CSD5								
				2F	3F	4F	5F	6F	8F	10F	15F	20F
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)	5.0								
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave , 1 cycle , $T_a=25^{\circ}C$	150								
Junction Temperature	T_J	$^{\circ}C$		-55~+125			-55~+150					
Storage Temperature	T_{STG}	$^{\circ}C$		-55 ~ +150								

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

Item	Symbol	Unit	Test Condition	CS D5							
				2F	3F	4F	5F	6F	8F	10F	15F
Peak Forward Voltage	V_F	V	$I_F=5.0A$	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		0.2			
	I_{RRM2}			$T_a = 100^{\circ}C$		10		5.0			
Thermal Resistance(Typical)	$R_{\theta J-A}$	$^{\circ}C/W$	Between junction and ambient		55						
	$R_{\theta J-L}$		Between junction and terminal		17						

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

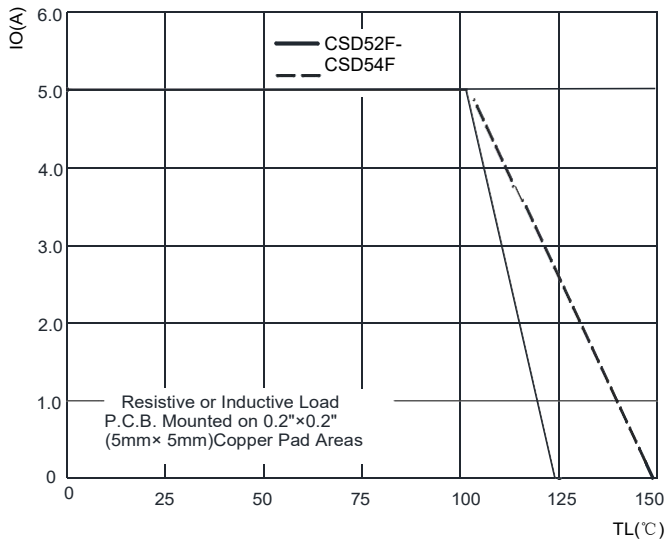


FIG. 2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

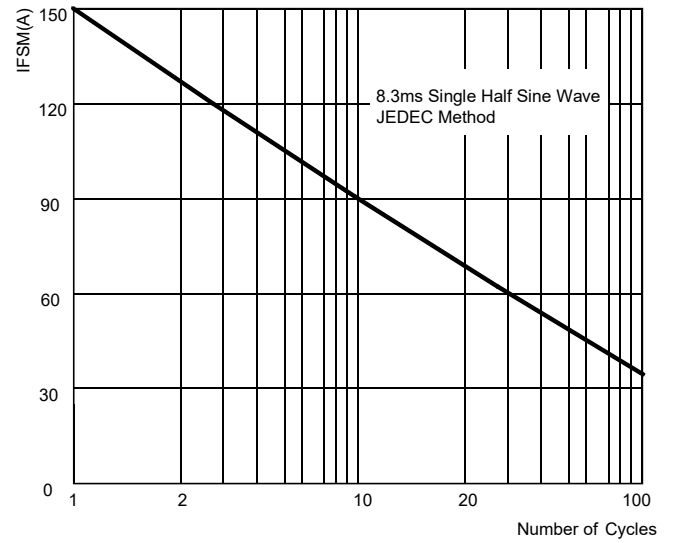


FIG. 3: TYPICAL FORWARD CHARACTERISTICS

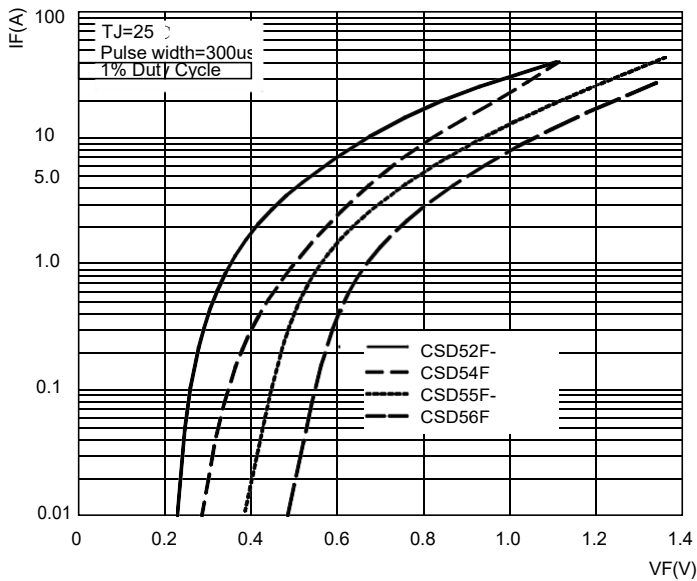
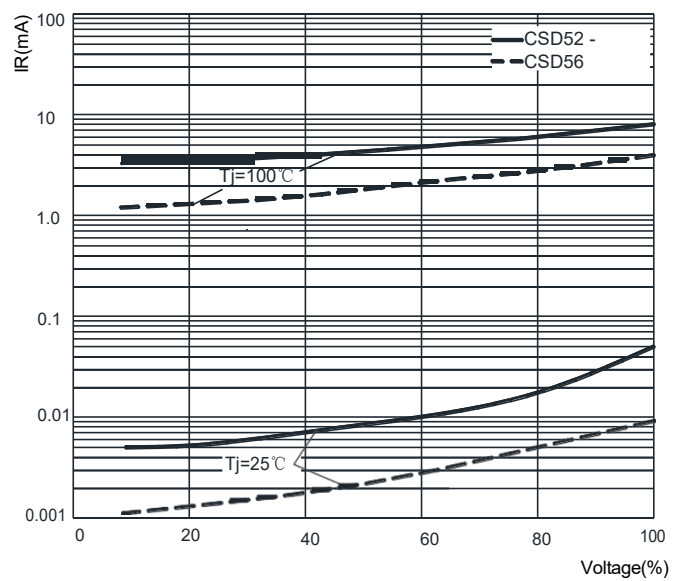
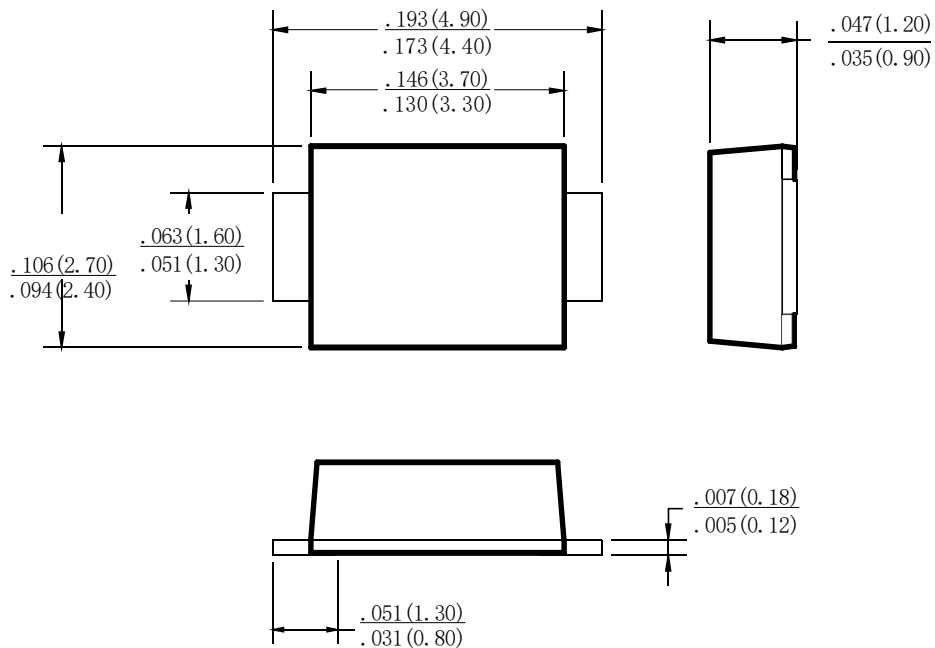


FIG. 4: TYPICAL REVERSE CHARACTERISTICS

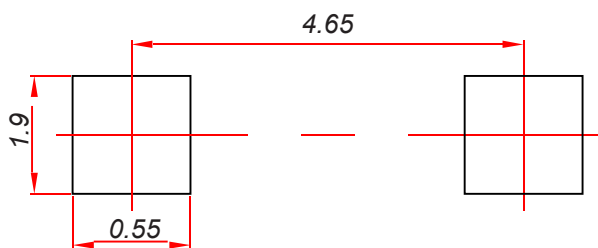


SMAF Package Outline Dimensions



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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