CAN CIRCLE SEMI

SMAF Plastic-Encapsulate Diodes

CSD32SMAF THRU CSD320SMAF

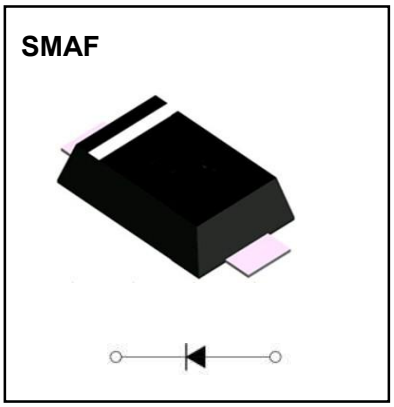
Schottky Rectifier Diodes

Features

- $I_{F(AV)}$ 3A
- 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	CSD3								
				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)	3.0								
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave，1 cycle，Ta=25℃	70								
Junction Temperature	T_J	℃		-55~+125				-55~+150				
Storage Temperature	T_{STG}	℃		-55 ~ +150								

Electrical Characteristics (T =25℃ UnleCSD otherwise specified)

Item	Symbol	Unit	Test Condition		CSD 3							
					2F	3F	4F	5F	6F	8F	10F	15F	20F
Peak Forward Voltage	V_F	V	I_F=3.0A		0.55			0.70		0.85		0.95	
Peak Reverse Current	I_{RRM1}	mA	$V_{RM}=V_{RRM}$	Ta =25℃	0.5					0.1			
	I_{RRM2}			Ta =100℃	10			5.0					
Thermal Resistance(Typical)	$R_{\theta J-A}$	℃/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

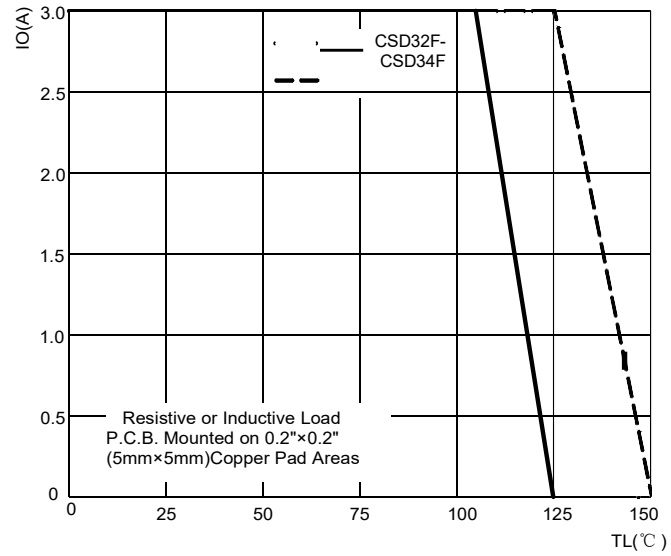


FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

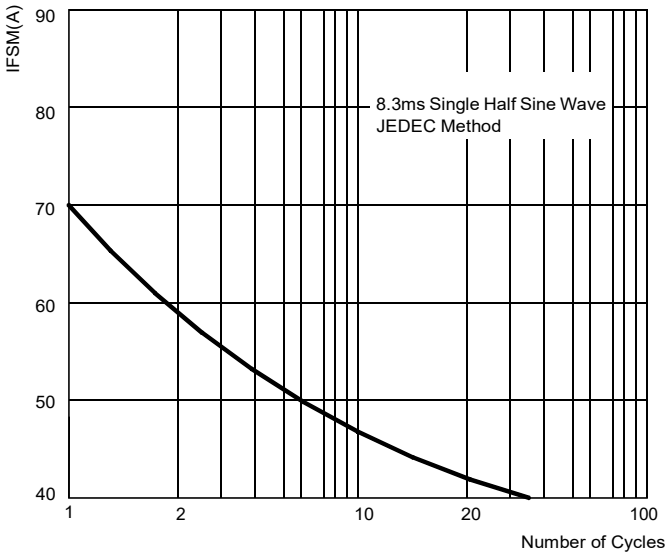


FIG.3: TYPICAL FORWARD CHARACTERISTICS

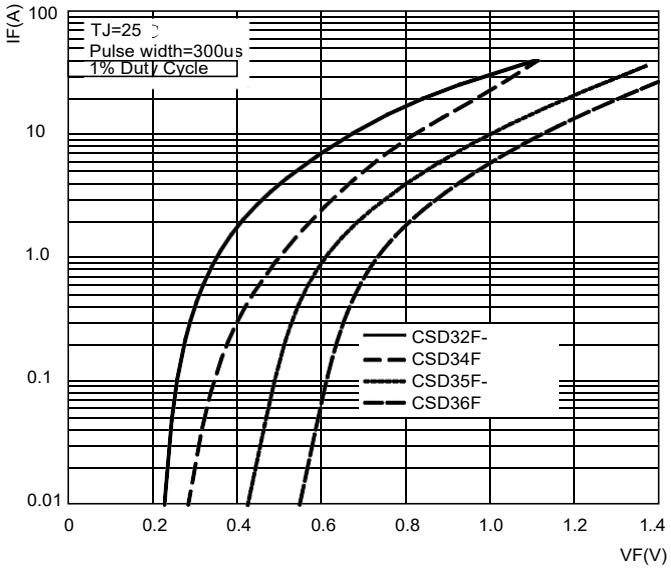
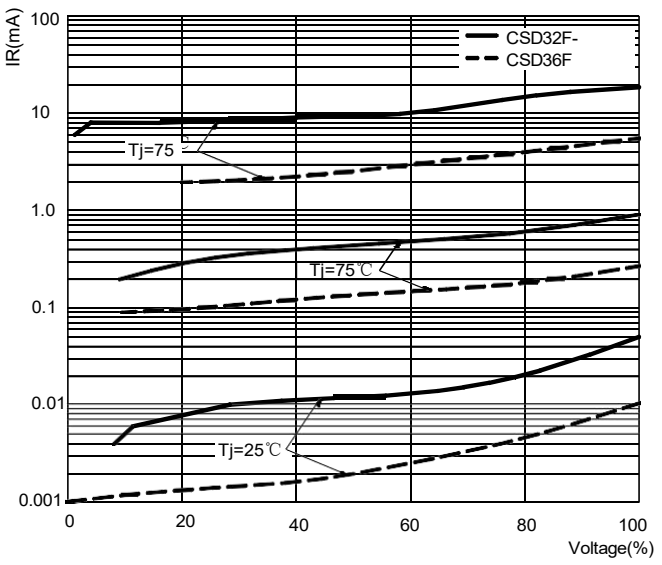
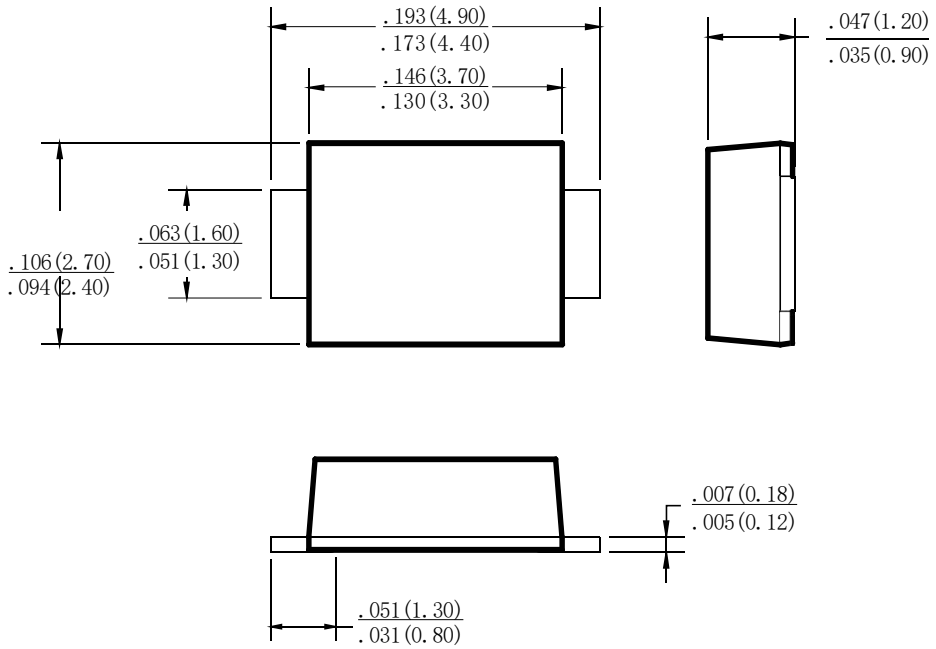


FIG.4：TYPICAL REVERSE CHARACTERISTICS

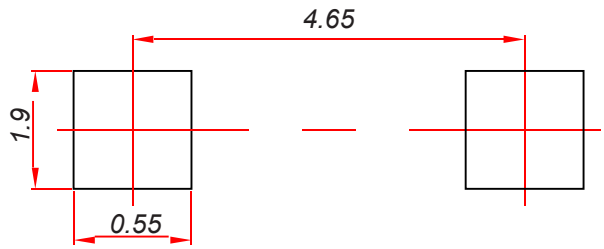


SMAF Package Outline Dimensions



Dimensions in inches and (millimeters)

SMAF Suggested Pad Layout



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm.
3.The pad layout is for reference purposes only.

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