

## CSD32SMAF THRU CSD320SMAF

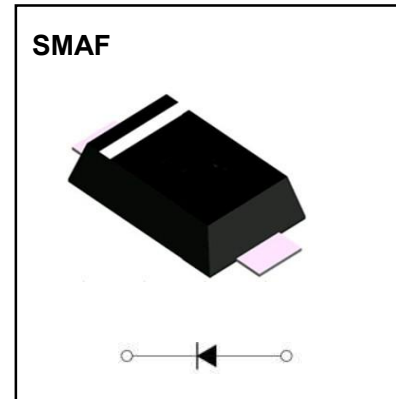
Schottky Rectifier Diodes

### 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 , $T_a=25^{\circ}C$	70														
Junction Temperature	$T_J$	$^{\circ}C$		-55~+125					-55~+150									
Storage Temperature	$T_{STG}$	$^{\circ}C$		-55 ~ +150														

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

Item	Symbol	Unit	Test Condition	CSD3														
				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	$V_{RM}=V_{RRM}$	$T_a=25^{\circ}C$		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	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

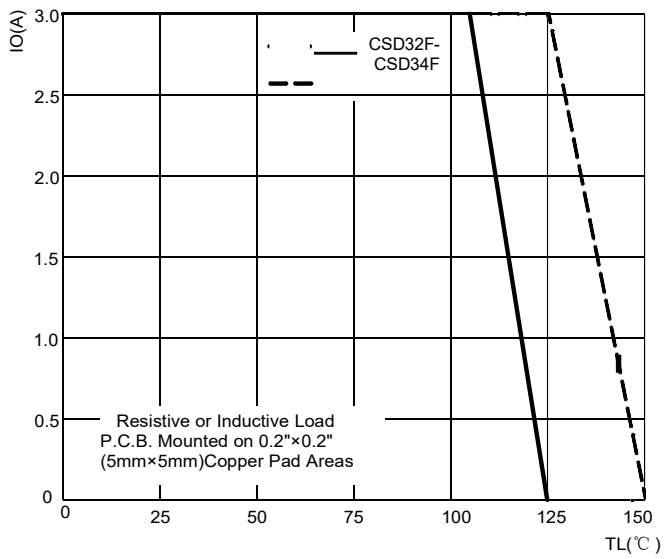


FIG.2: MAXIMUM NON-REPETITIVE FORWARD URGE CURRENT

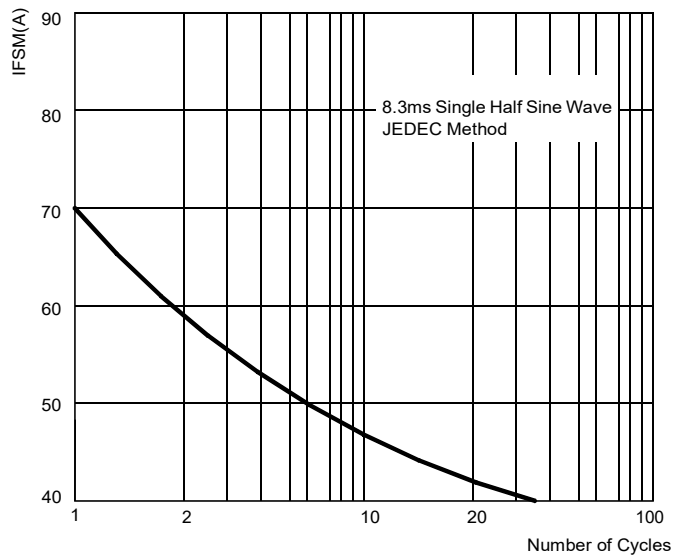


FIG.3: TYPICAL FORWARD CHARACTERISTICS

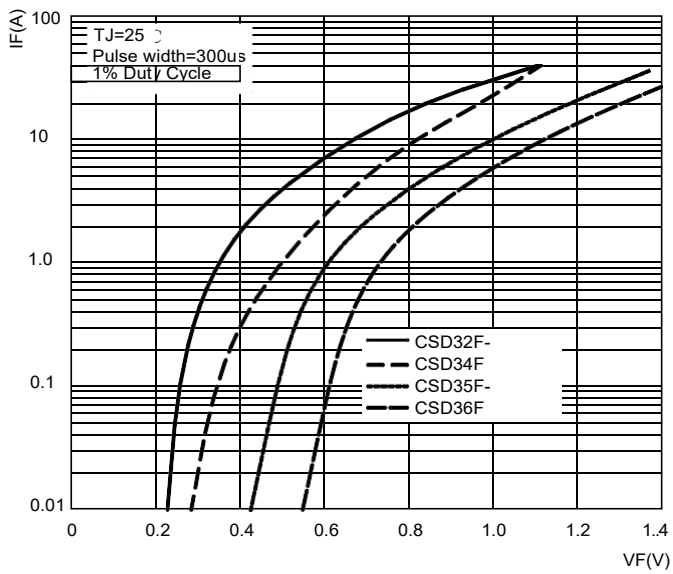
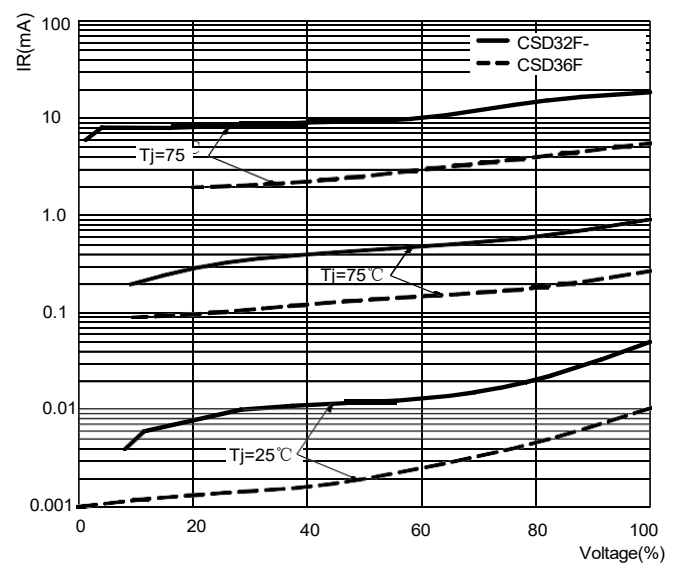
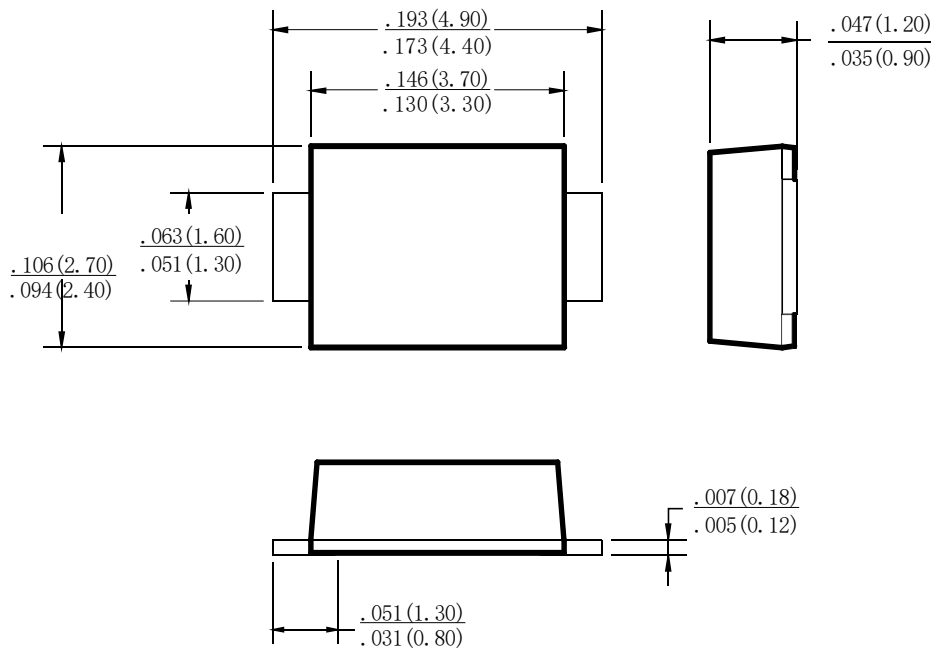


FIG.4: TYPICAL REVERSE CHARACTERISTICS

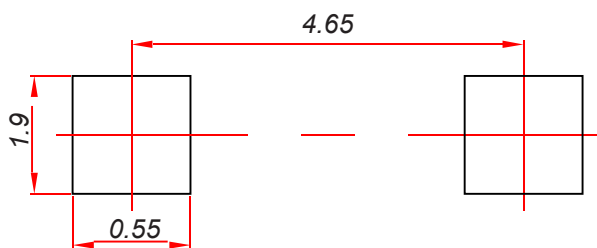


## SMAF Package Outline Dimensions



Dimensions in inches and (millimeters)

## SMAF Suggested Pad Layout



### Note:

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

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