

Features

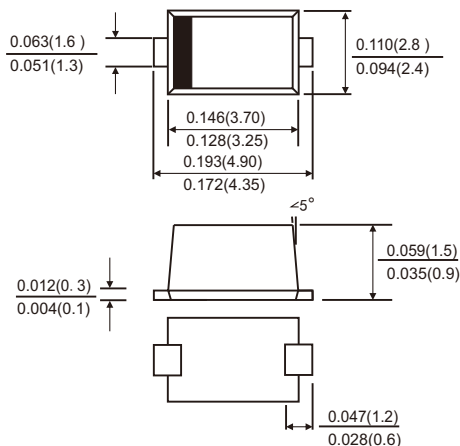
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction ,majority carrier conduction
- Guard ring for overvoltage protection
- Low power loss ,high efficiency
- High current capability ,low forward voltage drop
- High surge capability
- High temperature soldering guaranteed:260°C/10 seconds at terminals
- Component in accordance to RoHS 2015/863/EU



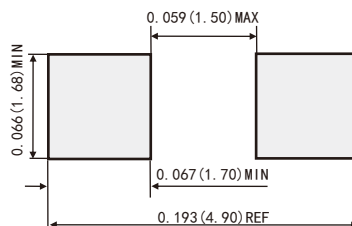
Mechanical Data

- Case: SMAF molded plastic body
- Terminals: Solder Plated, solderable per MIL-STD-750,method 2026
- Polarity: Color band denotes cathode end

SMAF



Suggested PAD Layout



Dimensions in inches and (millimeters)

Typical Applications

For use in low voltage ,high frequency inverters ,DC/DC converters, free wheeling ,and polarity protection applications

Maximum Ratings

(Ratings at 25°C ambient temperature unless otherwise specified)

Parameter	Symbol	Value	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	60	V
Maximum average forward rectified current (see fig.1)	$I_F(AV)$	3.0	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method at rated TL)	I_{FSM}	80	A
Operating junction temperature range	T_J	-55 to +150	°C
Storage temperature range	T_{stg}	-55 to +150	°C

RATINGS AND CHARACTERISTIC OF SS36S

Electrical Characteristics (T_a=25℃ Unless Otherwise Noted)

Parameter	Test Conditions		Symbol	Typ.	Max.	Unit
Instaneous forward voltage	I _F =3.0A	T _A =25℃	V _F ¹⁾	0. 58	0. 65	V
		T _A =100℃		0. 55	-	
		T _A =125℃		0. 52	-	
Reverse current	V _R =60V	T _A =25℃	I _R ²⁾	15	40	μ A
		T _A =100℃		-	5.0	mA
		T _A =125℃		-	20	
Typical junction capacitance	4V, 1MHz		C _J	160		pF

Notes: 1.Pulse test: 300 μ s pulse width,1% duty cycle
2.Pulse test: pulse width≤40ms

Thermal Characteristics

Parameter	Symbol	SMAF	Unit
Typical thermal resistance ³⁾	R _{θJA}	150	℃/W
	R _{θJL}	28.0	

3.P.C.B. mounted with 0.118" x 0.118" (3.0 mm x 3.0 mm) copper pad areas (≥40μm thick)

Availabale Pack Information

Product code	Pack	Reel Size (mm)	Quantity (pcs/reel)	Box Size L×W×H (mm)	Quantity (reel/box)	Carton Size L×W×H (mm)	Quantity (box/carton)
SS36S-SMAF	T/R	Φ 178	3000	180×73×180	2	380×380×200	10

RATINGS AND CHARACTERISTIC OF SS36S

Fig.1-Forward Current Derating Curve

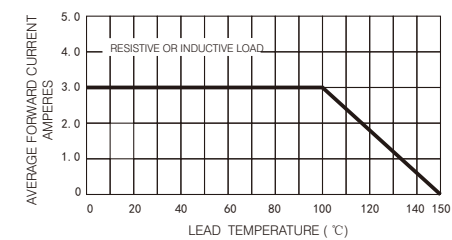


Fig.2-Maximum Non-repetitive Peak Forward Surge Current

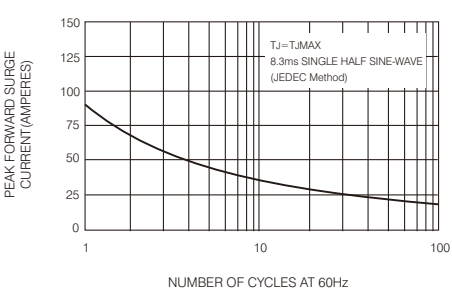


Fig.3-Typical Instantaneous Forward Characteristics

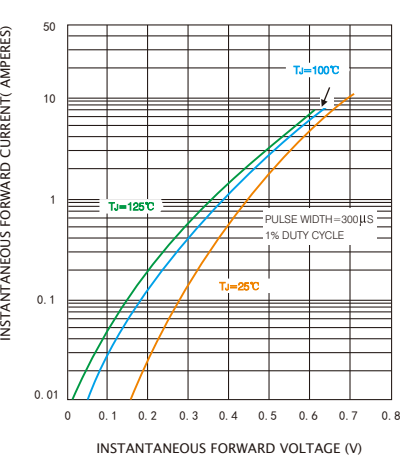


Fig.4-Typical Reverse Characteristics

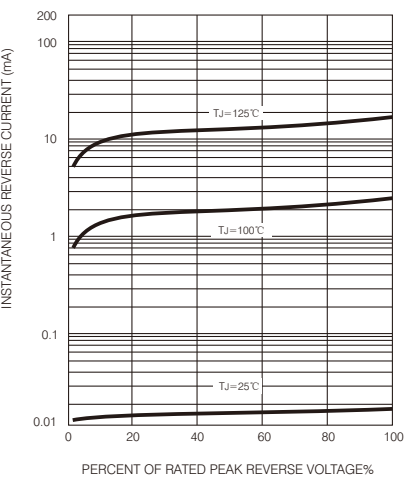


Fig.5-Typical Junction Capacitance

