

FEATURES

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Stable,High temperature,Glass passivated junction
- -V suffix for Automotive and other applications requiring unique site and control change requirments
- PPAP capable
- AEC-Q101 qualified
- High temperature soldering guaranteed:260°C/10 seconds at terminals
- Component in accordance to RoHS 2015/863/EU



AEC-Q101 Qualified

MECHANICAL DATA

- Case: SMAF molded plastic body
- Terminals: Solder Plated, solderable per MIL-STD-750,method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.028 gram



CASE: SMAF

MARKING:

JF-Logo

W-Work week

M-Work month

Y-Work year

S-Assembly loaction

S2JS: Device code

V: for automobile

TYPICAL APPLICATIONS

For use in high voltage rectifier,polarity protection,clamp applications

MAXIMUM RATINGS

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

Parameters	Symbol	Value	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	600	V
Maximum average forward rectified current	$I_{F(AV)}$	2.0	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method at rated TL)	I_{FSM}	65	A
Operating junction temperature range	T_J	-55 to+150	°C
Storage temperature range	T_{stg}	-55 to+150	°C

ELECTRICAL CHARACTERISTICS (T_A=25°C Unless otherwise noted)

Parameter	Test Conditions		Symbol	Min.	Typ.	Max.	Unit
Breakdown voltage Blocking voltage	I _R =10μA	T _J =25°C	V _{BR} V _R	600	-	-	V
Instaneous forward voltage	I _F =2.0A	T _J =25°C	V _F ¹⁾	-	0.92	0.95	V
		T _J =100°C		-	0.84	-	
		T _J =125°C		-	0.81	-	
Reverse current	V _R =600V	T _J =25°C	I _R ²⁾	-	-	2	μA
		T _J =100°C		-	-	10	
		T _J =125°C		-	-	100	
Junction capacitance	4V,1MHz		C _J	-	23	-	pF

Notes: 1.Pulse test: 300 μs pulse width,1% duty cycle

2.Pulse test: pulse width ≤ 40ms

THERMAL CHARACTERISTICS

Parameter	Symbol	SMAF	Unit
Typical thermal resistance ³⁾	R _{θJA}	75	°C/W
	R _{θJL}	27	

3. P.C.B. mounted with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas

AVAILABLE 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)	Quantity(carton) (K)
S2JS-V-SMAF	T/R	Φ178	3000	180×180×105	6	550×200×205	5	90

RATINGS AND CHARACTERISTIC OF S2JS-V

FIG.1-FORWARD CURRENT DERATING CURVE

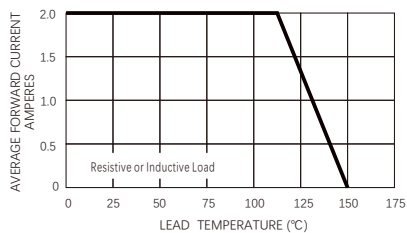


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

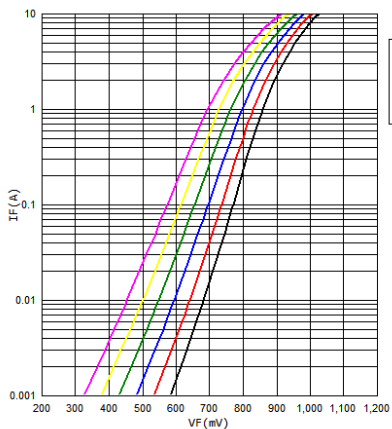


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

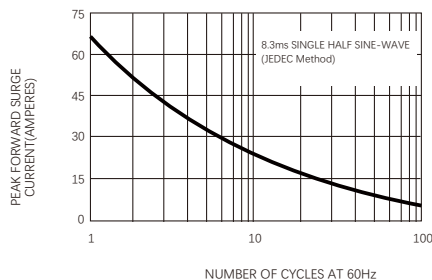


FIG.4-TYPICAL REVERSE CHARACTERISTICS

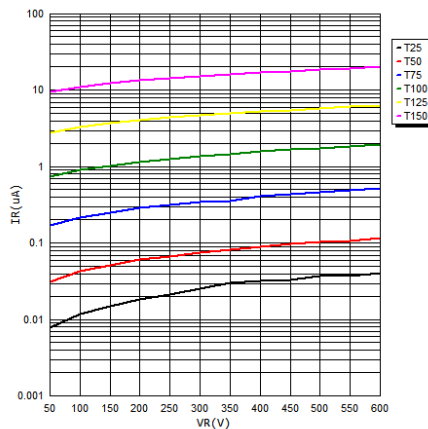
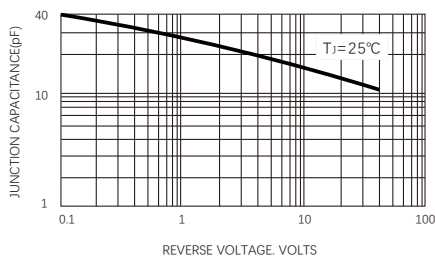
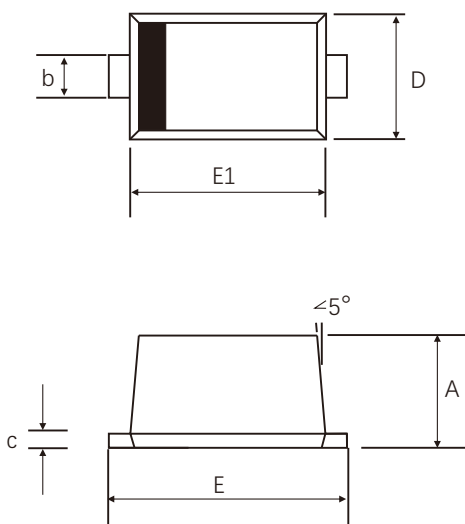


FIG.5-TYPICAL JUNCTION CAPACITANCE

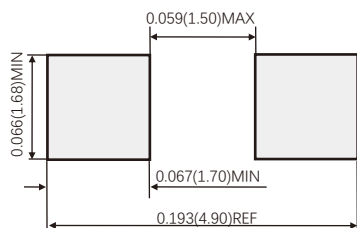


SMAF



Sym	Value(millimeters)		
	Min	Typ	Max
A	0.90	-	1.50
b	1.30	-	1.60
c	0.10	-	0.30
D	2.40	-	2.80
E	4.35	-	4.90
E1	3.25	-	3.70

Suggested PAD Layout



Dimensions in inches and (millimeters)

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