

LOW VF SCHOTTKY BARRIER RECTIFIER

Reverse Voltage - 200 Volts
 Forward Current - 3.0Amperes

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℃/10 seconds at terminals
- Component in accordance to RoHS 2011/65/EU



RoHS
COMPLIANT



MECHANICAL DATA

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

TYPICAL APPLICATIONS

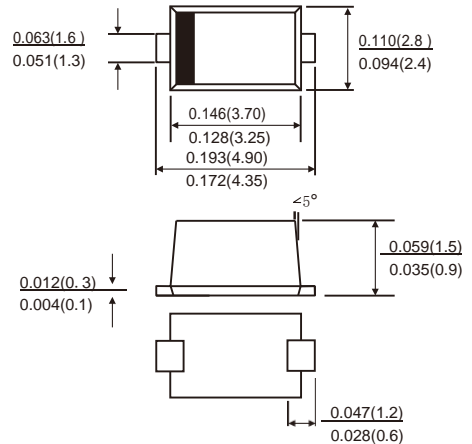
For use in low voltage ,high frequency inverters ,DC/DC converters,
 free wheeling ,and polarity protection applications

MAXIMUM RATINGS

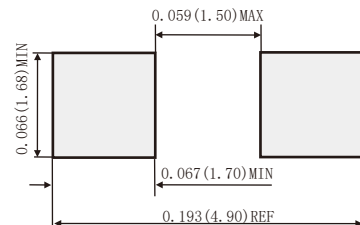
(Ratings at 25℃ ambient temperature unless otherwise specified)

Parameter	Symbol	Value	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	200	V
Maximum average forward rectified current	$I_{F(AV)}$	3.0	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method at rated TL)	I_{FSM}	100	A
Operating junction temperature range	T_J	-55 to+150	℃
Storage temperature range	T_{stg}	-55 to+150	℃

SMAF



Suggested PAD Layout



Dimensions in inches and (millimeters)

RATINGS AND CHARACTERISTIC OF KSS320LS-V

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

Parameter	Test Conditions	Symbol	TYP.	MAX.	Unit
Instaneous forward voltage	I _F =3.0A	T _A =25°C	0.82	0.85	V
		T _A =100°C	0.71	-	
		T _A =125°C	0.67	-	
Reverse current	V _R =200V	T _A =25°C	-	10	μA
		T _A =100°C	-	200	
		T _A =125°C	-	1500	
Typical junction capacitance	4V,1MHz	C _J	70		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}	150	°C/W
	R _{θJL} θ	28	

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 LxWxH (mm)	Quantity (reel/box)	Carton Size LxWxH (mm)	Quantity (box/carton)
KSS320LS-V	T/R	Φ178	3000	180×73×180	2	380×380×200	10

RATINGS AND CHARACTERISTIC OF KSS320LS-V

FIG.1-FORWARD CURRENT DERATING CURVE

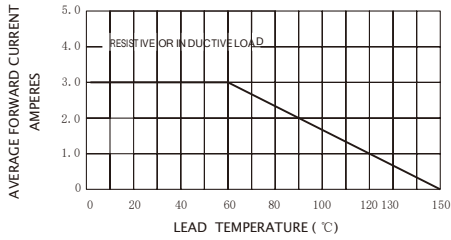


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

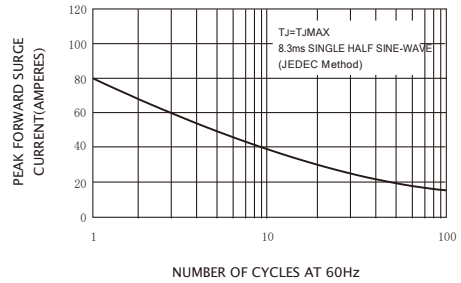


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

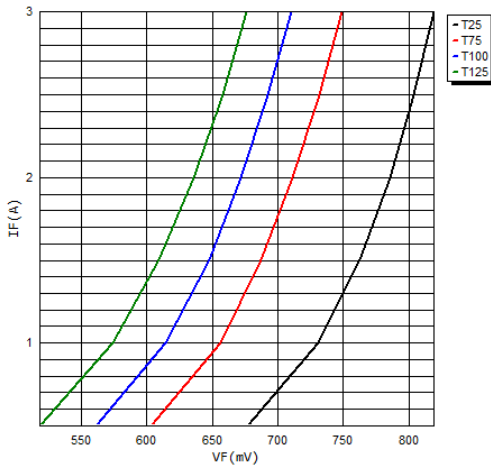


FIG.4-TYPICAL REVERSE CHARACTERISTICS

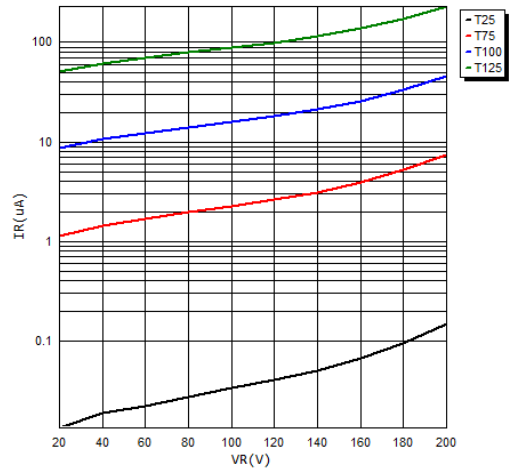


FIG.5-TYPICAL JUNCTION CAPACITANCE

