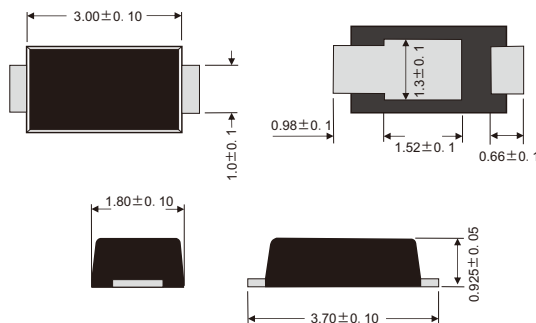


FEATURES

- Very low profile package
- Ideal for automated placement
- Trench Mos Barrier Schottky
- High Operating Junction Temperature
- Low power loss ,high efficiency
- High current capability ,low forward voltage drop
- High surge capability
- Meets MSL Level 1,per J-STD-020,LF maximum peak of 260°C
- Component in accordance to RoHS 2011/65/EU



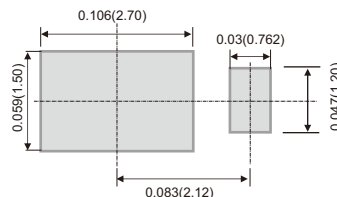
SOD-123P



MECHANICAL DATA

- Case: Flat lead SOD-123P small outline plastic package
- Molding compound meets UL 94 V-0 flammability rating
- Terminals: solderable per J-STD-002 and JESD22-B102
- Polarity: color band denotes cathode end
- Mounting Position: Any
- Weight: 0.02g (approximately)
- Marking:L34P

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}	40	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}	50	A
Operating junction temperature range	T_j	-55 to+150	°C
Storage temperature range	T_{stg}	-55 to+150	°C

RATINGS AND CHARACTERISTIC OF L34P

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

Parameter	Test Conditions		Symbol	TYP.	MAX.	Unit
Instantaneous forward voltage	I _F =1.0A	T _A =25°C	V _F ¹⁾	0.38	0.43	V
	I _F =2.0A			0.42	0.47	
	I _F =3.0A			0.45	0.50	
	I _F =1.0A	T _A =125°C		0.28	—	
	I _F =2.0A			0.33	—	
	I _F =3.0A			0.40	—	
Reverse current	V _R =40V	T _A =25°C	I _R ²⁾	100	300	μA
		T _A =125°C		6	30	mA

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

2.Pulse test: pulse width≤40ms

THERMAL CHARACTERISTICS

Parameter	Symbol	L34P	Unit
Typical thermal resistance ³⁾	R _{θJA}	175.0	°C/W

3.PCB Mounted with The Suggested PAD Size

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)
L34P-SOD-123P	T/R	Φ178	3000	195×135×195	10	370×370×420	8

RATINGS AND CHARACTERISTIC OF L34P

FIG.1-FORWARD CURRENT DERATING CURVE

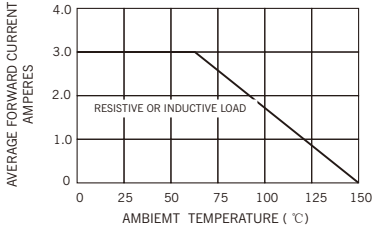


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

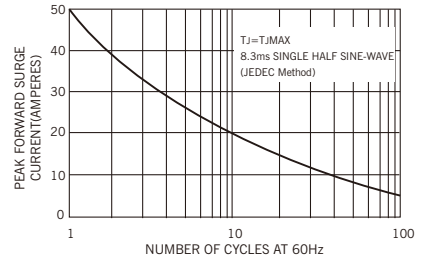


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

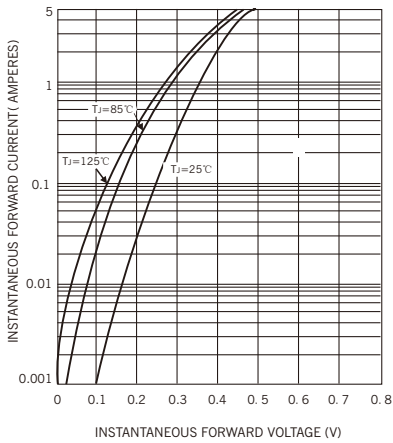


FIG.4-TYPICAL REVERSE CHARACTERISTICS

