

LS34 thru LS35

Surface Mount Schottky Rectifier Reverse Voltage 40~50V Forward Current 3A

Features

- Schottky barrier diodes
- Low forward voltage drop
- Low leakage current
- Moisture sensitivity: level 1, per J-STD-020
- Solder dip 260 °C, 10 s
- Low profile, typical thickness 1.0mm





eSGB (SMAF)

Typical Applications

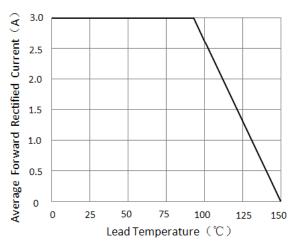
For use in low voltage, high frequency inverters, free wheeling, and polarity protection application

Maximum Ratings (TA = 25 °C unless otherwise noted)								
Parameter	Symbol	LS34	LS345	LS35	Unit			
Maximum repetitive peak reverse voltage	VRRM	40	45	50	V			
Maximum RMS voltage	VRMS	28	31.5	35	V			
Maximum DC blocking voltage	VDC	40	45	50	V			
Maximum average forward rectified current at TL (See Fig.1)	IF(AV)	3.0			А			
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	IFSM	100			А			
Operating junction and storage temperature range	TJ, TSTG	- 55 to + 150			°C			

Electrical Characteristics (TA = 25 °C unless otherwise noted)								
Parameter	Test Conditions	Symbol	LS34	LS345	LS35	Unit		
Instantaneous forward voltage	IF=3A, TA=25℃	VF	typ:0.47, Max:0.52			Volts		
	IF=3A, TA=125℃		typ:0.39					
Maximum DC reverse current	TA=25℃	ID	IR 1			mA		
at rated DC blocking voltage	TA=125℃	IIX	50					
Typical junction capacitance	4.0 V, 1 MHz	CJ	234		pF			
Typical thermal resistance	juntion to lead	R _{θJL} ¹⁾	20		°C/W			

Note1:Thermal resistance from junction to lead,mounted on PCB with 8.0×8.0mm copper pads

 $(TA = 25^{\circ}C \text{ unless otherwise noted})$



Ratings and Characteristics Curves

Figure 1. Forward Current Derating Curve

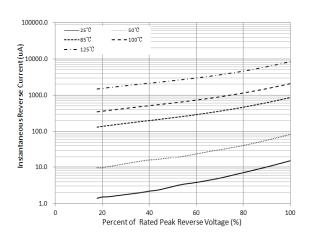


Figure 3. Typical Reverse Characteristics

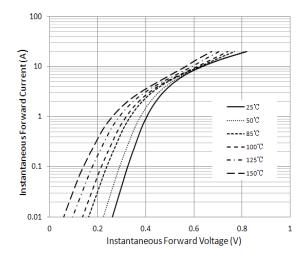


Figure 5. Typical Instantaneous Forward Characteristics

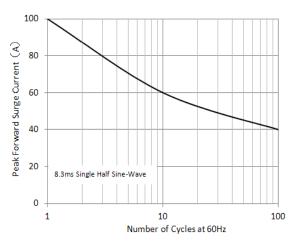


Figure 2.Maximum Non-Repetitive Peak Forward Surge Current

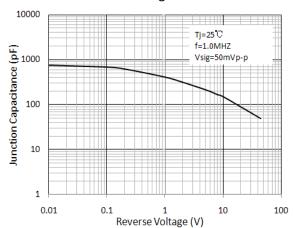


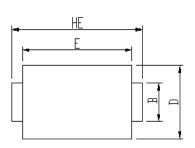
Figure 4. Typical Junction Capacitance

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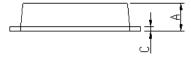
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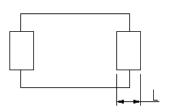
Package Outline Dimensions

in inches (millimeters)



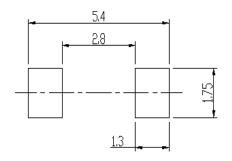






DIM	Unit: mm		Unit: inch		
	MIN	MAX	MIN	MAX	
Α	0.92	1.08	0.036	0.043	
A1	0	0.1	0.000	0.004	
В	1.25	1.45	0.049	0.057	
C	0.1	0.25	0.004	0.010	
D	2.6	2.8	0.102	0.110	
E	4.1	4.3	0.161	0.169	
L	0.7	1.1	0.028	0.043	
HE	4.8	5.2	0.189	0.205	

Soldering footprint

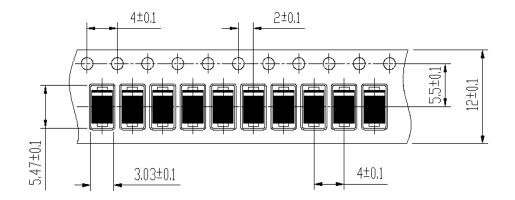


Packing Information

Packing quantities:

10,000 pcs/Reel, 12mm Tape, 13" Reel

Tape & Reel Specification





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