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DSS34 SCHOTTKY BARRIER RECTIFIER

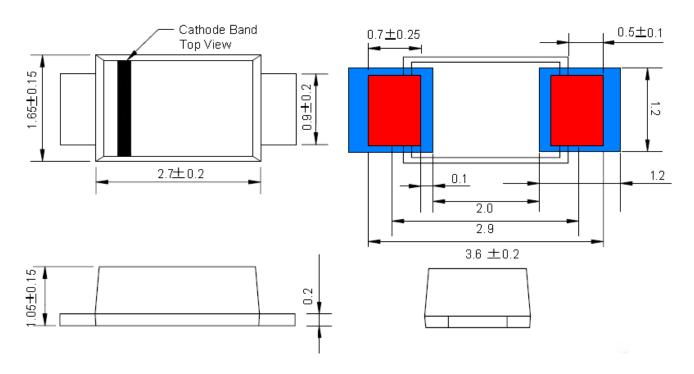
Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Metal silicon junction, majority carrier conduction
- For surface mount applications
- Low power loss, high efficiency
- High current capability, Low forward voltage drop
- Low profile package
- Built-in strain relief, ideal for automated placement
- For use in low voltage, high frequency inverters, free wheeling, and polarity applications
- High temperature soldering guaranteed: 260°C/10 seconds at terminals

Mechanical Data

- Case: JEDEC SOD-123FL molded plastic body
- Terminals: Solderable per MIL-STD-750, Method 2026
- · Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.0007 ounce, 0.02 grams

Mechanical Dimensions (In mm)



Note: Blue area is suggested pad layout and red area is package terminals.

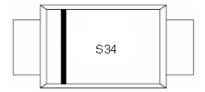
SOD-123FL

- China Germany Korea Singapore United States
 - http://www.smc-diodes.com
 sales@ smc-diodes.com



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Marking Diagram:



S34

= Marking code

Cautions: Molding resin

Epoxy resin UL:94V-0

Ordering Information:

Device	Package	Shipping
DSS34	SOD-123FL	3000pcs / reel

For information on tape and reel specifications, including part orientation and tape sizes, please refer to our Tape and Reel Packaging Specification

Maximum Ratings and Electrical characteristics

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz resistive or inductive load, for capacitive load, derate by 20 %

Characteristic	Symbol	DSS34	Unit
Marking code		S34	
Maximum Repetitive Peak Reverse Voltage Maximum DC Blocking Voltage	$egin{array}{c} egin{array}{c} \egin{array}{c} \egin{array}{c} \egin{array}{c} \egin{array}{c} \egin{array}{c} \egin{array}$	40	V
Maximum RMS voltage	V_{RMS}	28	V
Maximum Average Forward Rectified Current (See fig.1)	$I_{F(AV)}$	3.0	Α
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	80.0	А
Max Instantaneous Forward Voltage at 3.0A (Note 1)	V_{F}	0.50	V
Peak Reverse Current (Note 1)	= 25°C = 100°C	0.2	mA
Peak Reverse Current (Note 1) @T _A = 25°C At Rated DC Blocking Voltage (Note 1) @T _A = 100°C		20	
Typical Junction Capacitance(Note 3)	CJ	250	pF
Typical Thermal Resistance(Note 2)	$egin{array}{c} R_{ hetaJA} \ R_{ hetaJL} \end{array}$	55 17	°C/W
Operating Temperature Range	T _J	-65 to +150	°C
Storage Temperature Range	T_{STG}	-65 to +150	°C

Note: 1. Pulse test: 300 us pulse width, 1% duty cycle.

- 2. PCB mounted on 0.55 X 0.55" (14 X 14 mm) copper pad areas.
- 3. Measured at 1MHz and applied reverse voltage of 4V D.C
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FIG.1-FORWARD CURRENT DERATING CURVE

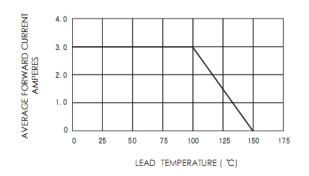


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

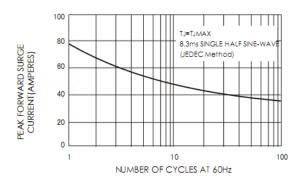


FIG.3-TYPICAL INSTANTANEOUS FORWARD **CHARACTERISTICS**

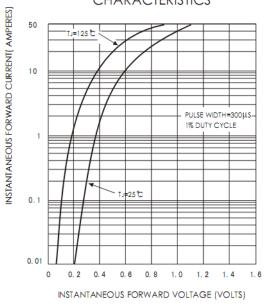
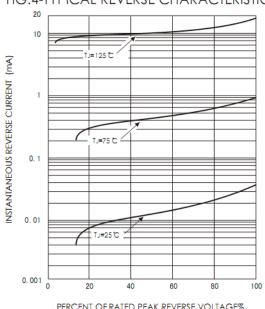


FIG.4-TYPICAL REVERSE CHARACTERISTICS



PERCENT OF RATED PEAK REVERSE VOLTAGE%

FIG.5-TYPICAL JUNCTION CAPACITANCE

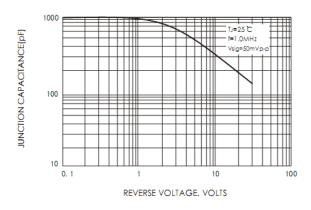
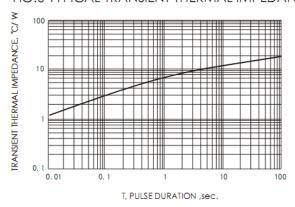


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE



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