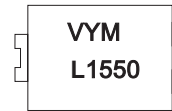


15A Surface Mount Schottky Barrier Rectifier - 50V
PRIMARY CHARACTERISTICS

V_{RRM}	50V
I_O	15A
V_F	0.48V
$T_{J,Max}$	150°C

TO-277B
PACKAGE
• Body Marking Example
Marking :L1550


V:Product Lines

Y:1-digit BC year code, 4-2014,5-2015...etc

M:Month, EX : 1-1,2-2,...10-O,11-N,12-D

PIN 3 ← PIN 2
PIN 1

FEATURES

- Schottky Barrier Chip
- High Thermal Reliability
- Patented Super Barrier Rectifier Technology
- High Forward Surge Capability
- Ultra Low Power Loss,High Efficiency
- Excellent High Temperature Stability
- Moisture Sensitivity Level 1

MECHANICAL DATA

- Case : Molded plastic,TO-277B
- Polarity : Shown above
- Terminals :Plated terminals, solderable per MIL-STD-750,Method 2026
- Epoxy : UL94-V0 rated flame retardant

Maximum Ratings and Electrical Characteristics @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

Single Phase,half wave,60Hz,resistive or inductive load.For capacitive load,derate current by 20%.

RATINGS	SYMBOL	MBR1550LPS	UNITS
Peak Repetitive Reverse Voltage	V_{RRM}	50	Volts
Maximum RMS Volts	V_{RMS}	35	Volts
Maximum DC Blocking Voltage	V_{DC}	50	Volts
Average Rectified Output Current (Note 1)	I_O	15.0	Amps
Non-Repetitive Peak Forward Surge 8.3ms Single Half Sine-Wave Superimposed on rated load(JEDEC Method) (Note2)	I_{FSM}	275	Amps
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	80.0	°C/W
Thermal Resistance Junction to Lead	$R_{\theta JL}$	15.0	
Operating Storage Temperature Range	T_J	150	°C
Storage Temperature Range	T_{STG}	-55 ~ +150	°C

ELECTRICAL CHARACTERISTICS (At $T_A = 25^{\circ}\text{C}$ unless otherwise noted)

CHARACTERISTICS	SYMBOL	MBR1550LPS	UNITS
Marking Code		L1550	
Forward Voltage Drop @ $I_F=15A$	@ $T_A = 25^{\circ}\text{C}$ V_F	0.48	Volts
Max. Reverse Current Leakage at Rated DC Blocking Voltage	@ $T_A = 25^{\circ}\text{C}$ I_R	0.3	mAmps
	@ $T_A = 100^{\circ}\text{C}$	15	

Note: 1.Valid Provided that are kept at ambient temperature at a distance of 9.5mm from the case.

2.Fr-4pcb.2oz.Copper,minimum recommend pad layout .18.8mm×14.4.Anode pad dimensions 5.6mm×14.4mm.



15A Surface Mount Schottky Barrier Rectifier - 50V

Fig.1 - Forward Current Derating Curve

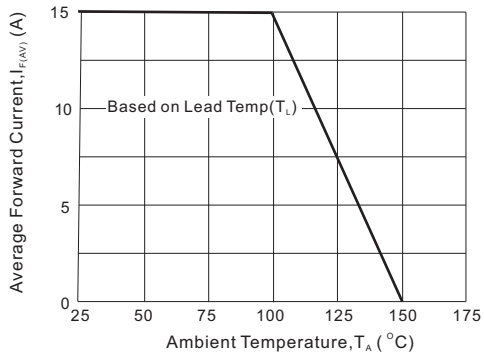


Fig2 : Instantaneous Forward Voltage

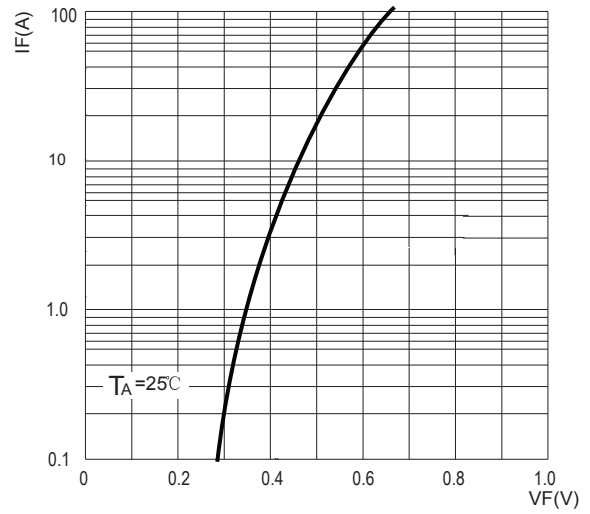


Fig3: Surge Forward Current Capability

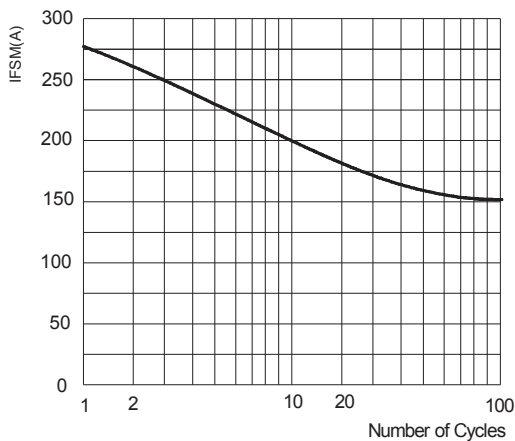
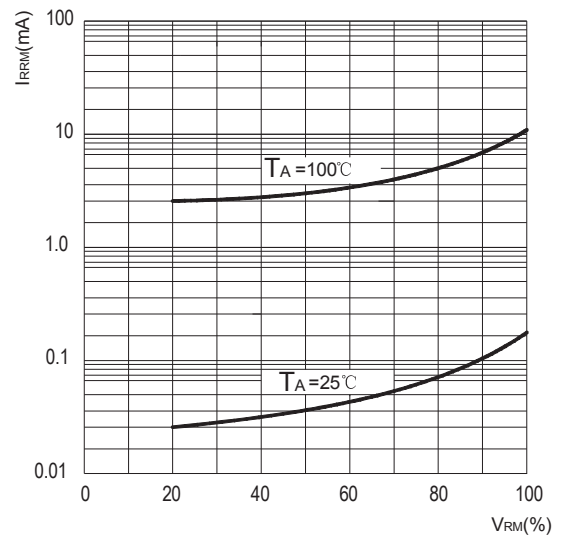


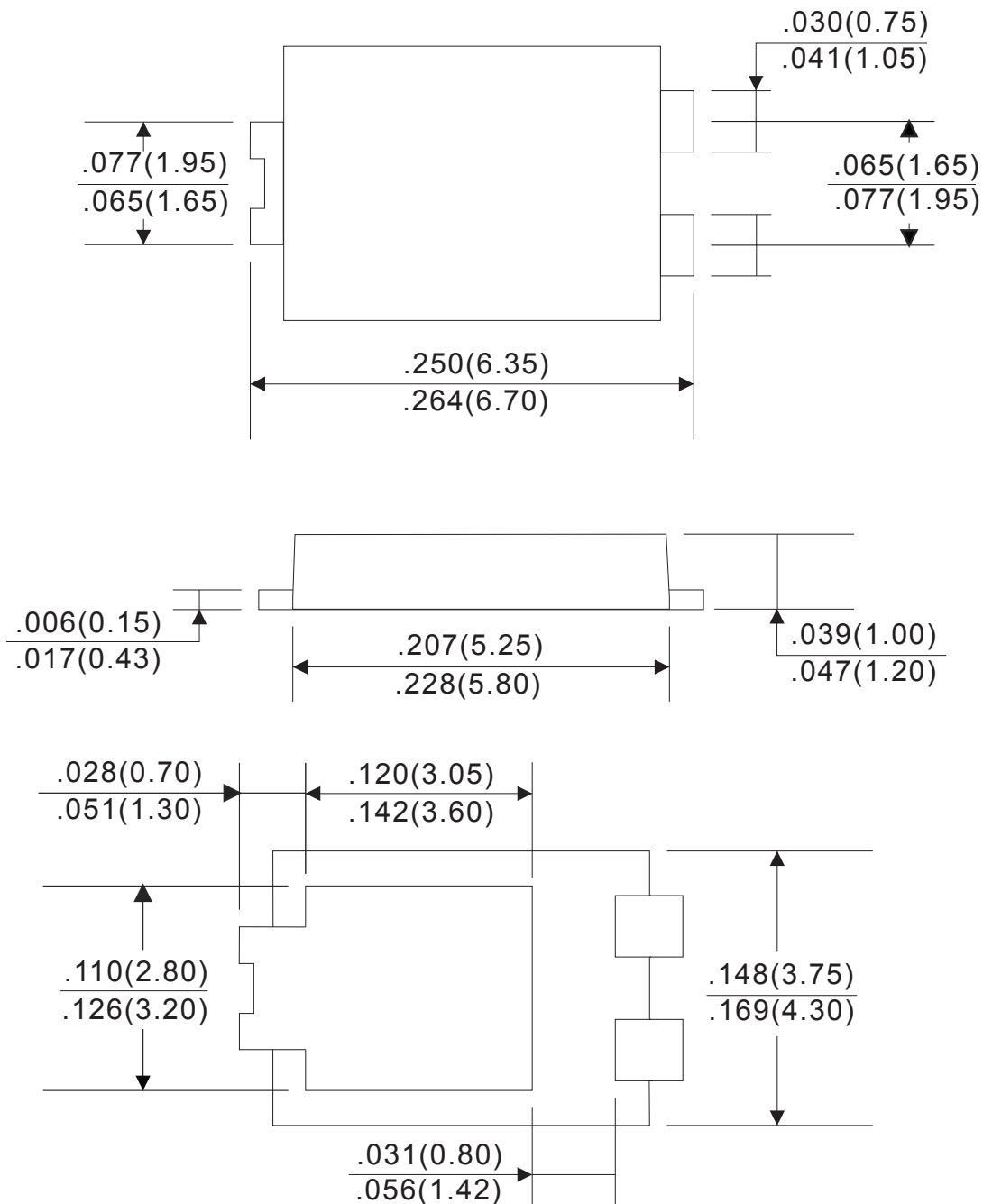
Fig4: Typical Reverse Characteristics





Outline Drawing

TO-277B



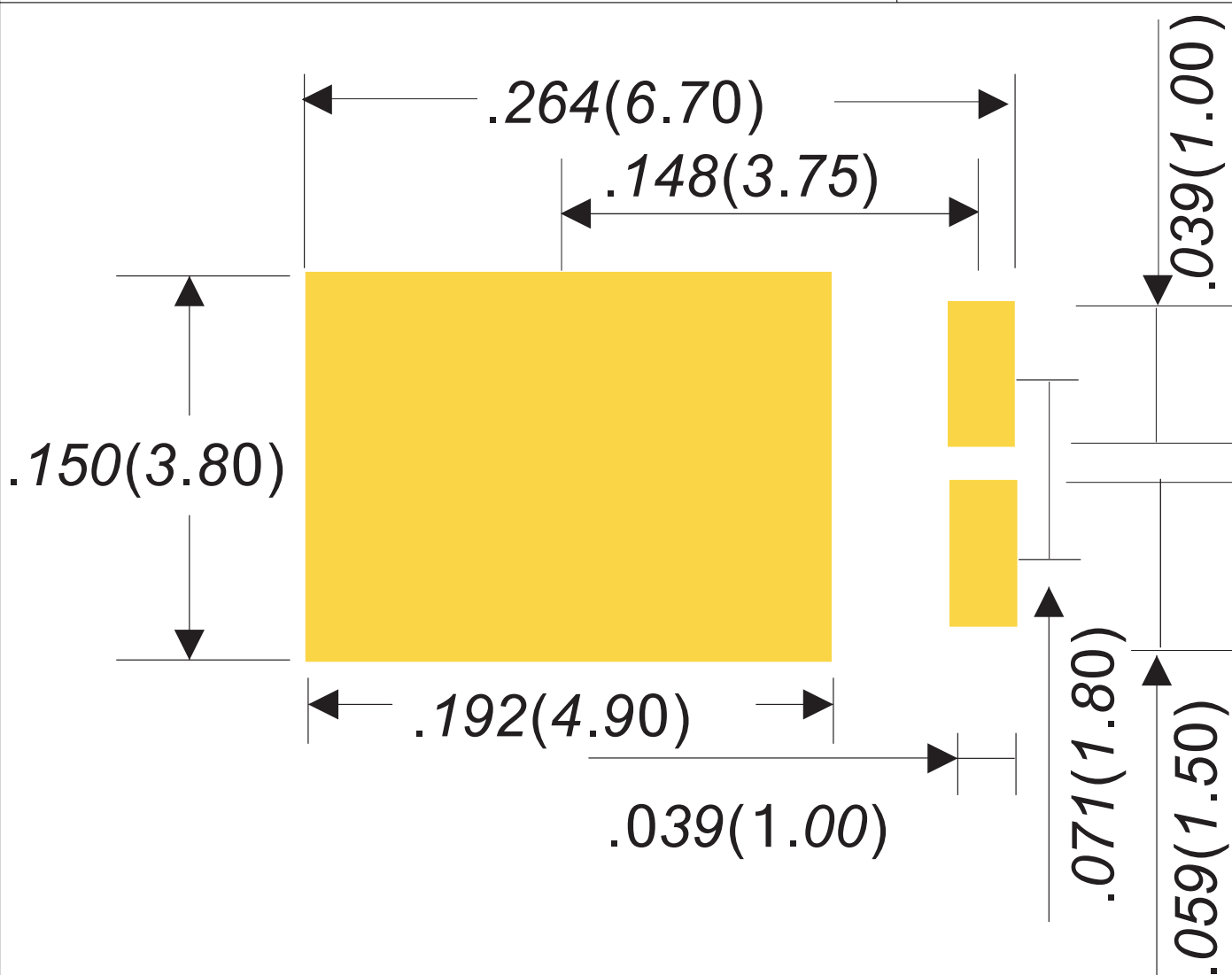
Dimensions in inches and (millimeters)

Rev.A



Suggested Soldering Pad Layout

TO-277B



Dimensions in inches and (millimeters)

RevA

**Ordering Information:**

Device PN	Marking ⁽⁴⁾	Packing
MBR1550LPS -T ⁽¹⁾ G ⁽²⁾ -WS ⁽³⁾	L1550	Tape&Reel: 3 Kpcs/Reel

Note: (1) Packing code, Tape & Reel Packing

(2) Packing code Suffix"H" for halogen free product. All materials and products supplied comply with the U.S. Toxic Substances Control Act statement, PBT Chemicals.

(3) Willas brand abbreviation, Label Type does not display.

(4) There may be additional marking, which relates to the lot trace code information (data code and vendor code), the logo or the environmental category on the device.

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