

PRIMARY CHARACTERISTICS

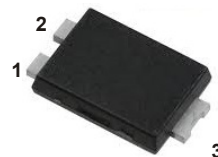
V_{RRM}	45V
I_O	10A
$V_F@I_F=10A(TYP)$	0.43V
$T_{J,Max}$	150°C

FEATURES

- Ultra Low Forward Voltage Drop
- High Current Capability
- Lead Free Finish/RoHS Compliant(Note 1)
- Moisture Sensitivity Level 1

TO-277B PACKAGE

Marking :1045UL or 1045L



V:Product Lines

Y:A.D. late code, EX : 4-2014,5-2015

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



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 @TA=25°C unless otherwise specified

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

Parameter	Symbol	MBR1045 ULPS		Unit
Peak Repetitive Reverse Voltage	V_{RRM}	45		V
Working Peak Reverse Voltage	V_{RWM}			
DC blocking voltage	V_R			
RMS Rectified Voltage	$V_{R(RMS)}$	31.5		V
Average Rectified Output Current TL = 90°C	I_O	10		A
Non-Repetitive Peak Forward Surge8.3ms Single Half Sine-Wave Superimposed on rated load(JEDEC Method)	I_{FSM}	270		A
Forward Voltage Drop @IF=2A, Tj=25°C @IF=5A, Tj=25°C @IF=10A, Tj=25°C @IF=2A, Tj=125°C @IF=5A, Tj=125°C @IF=10A, Tj=125°C	VF	TYP	MAX	V
		0.33	-----	
		0.38	-----	
		0.43	0.50	
		0.22	-----	
		0.28	-----	
		0.39	0.45	
Peak Reverse Curent @VR=36V, Tj=25°C	IR	120		uA
At Rated DC Blocking Voltage @VR=45V, Tj=25°C		0.25		mA
@VR=45V, Tj=125°C		100		
Typical Thermal Resistance	$R_{\theta JC}$	8.0		°C/W
Operating junction temperature range	Tj	-55 to + 150		°C
storage temperature range	Tstg	-55 to + 150		°C



RATING AND CHARACTERISTIC CUEVES

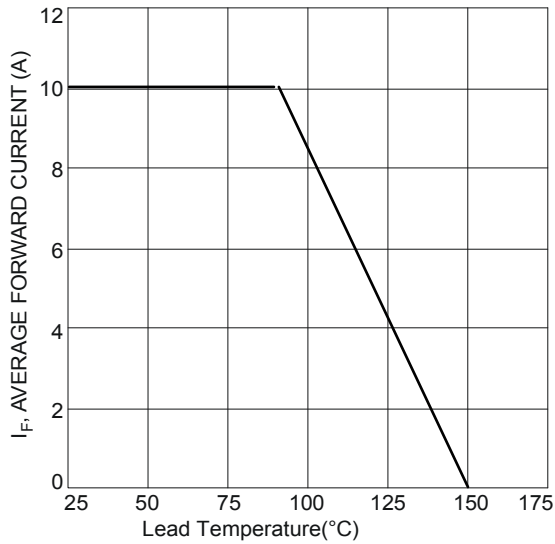


Figure 1 Forward Current Derating Curve

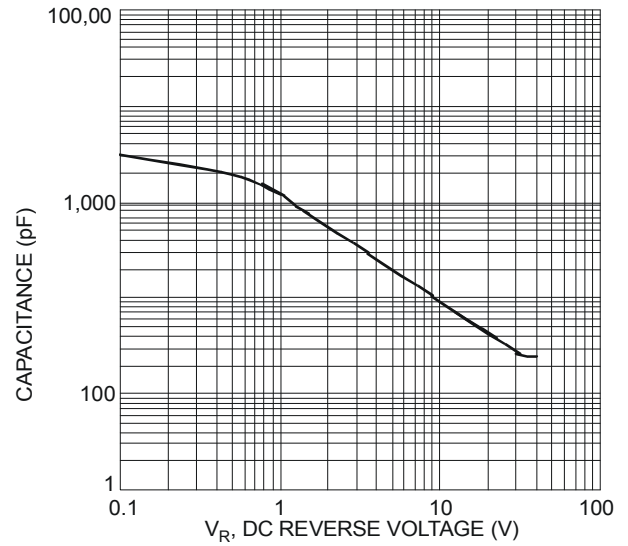


Figure 2 Typical Junction Capacitance

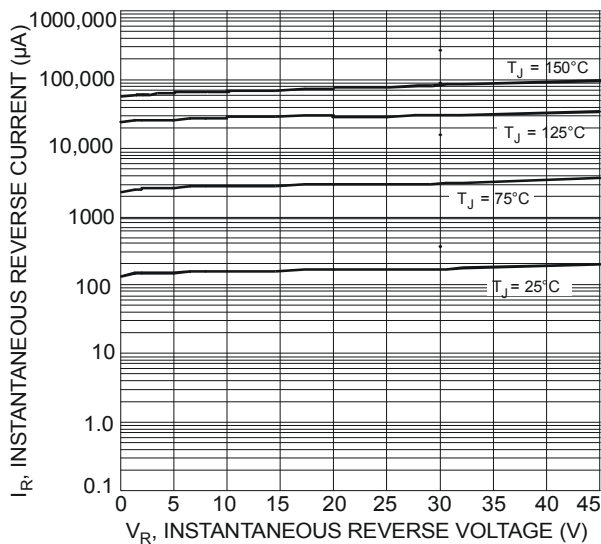


Figure 3 Typical Reverse Characteristics

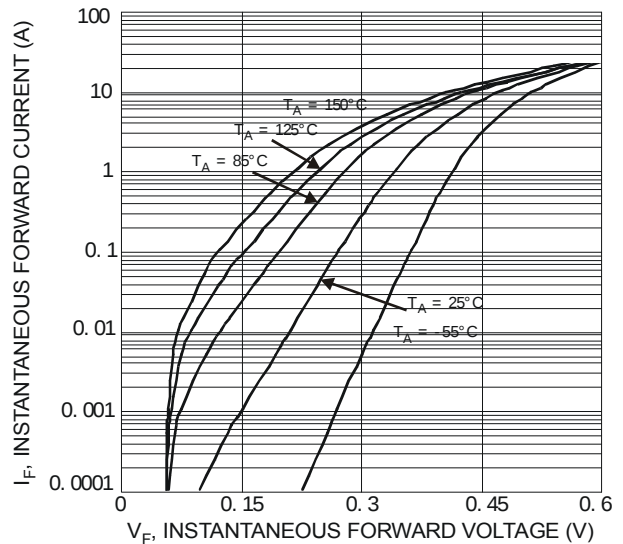
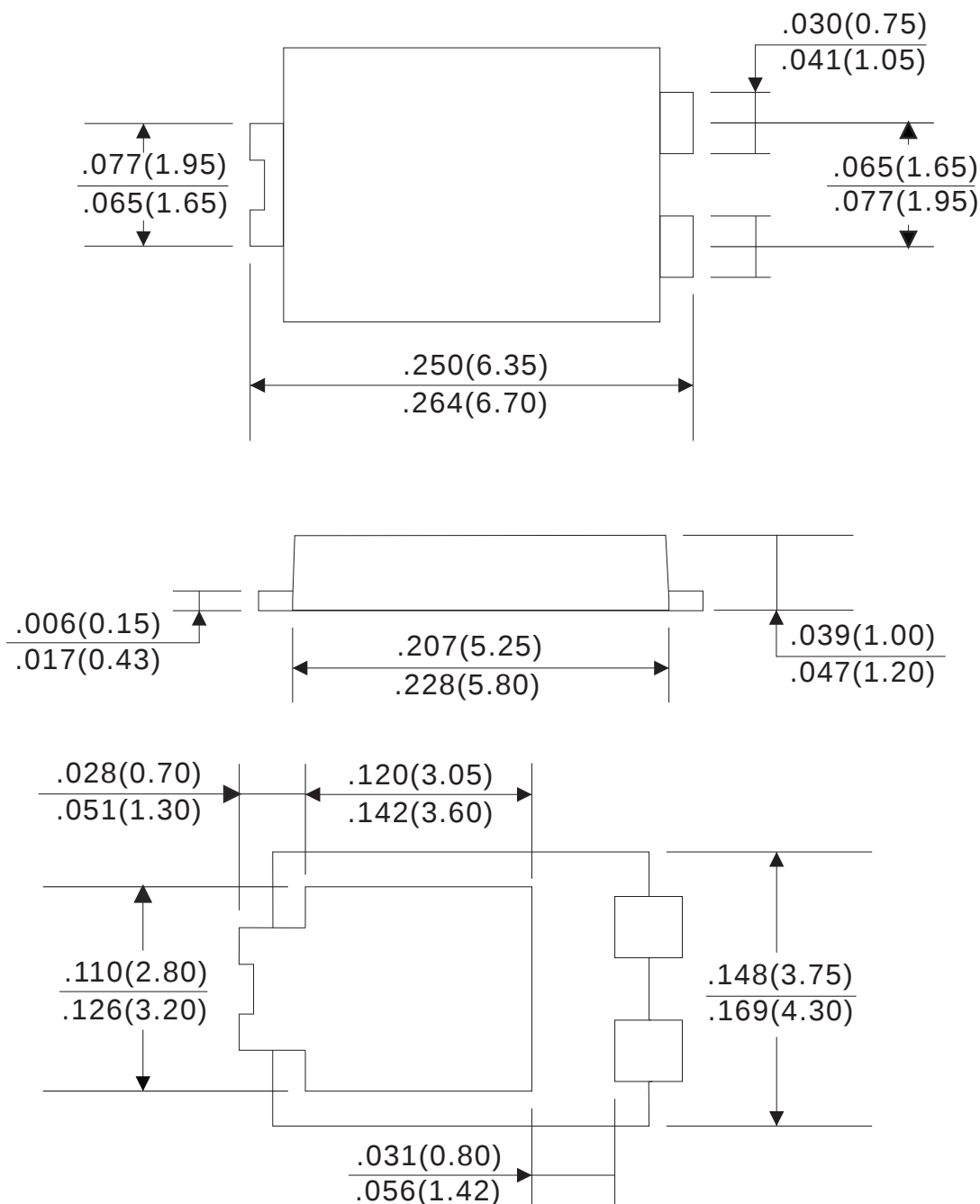


Figure 4 Typical Forward Characteristics

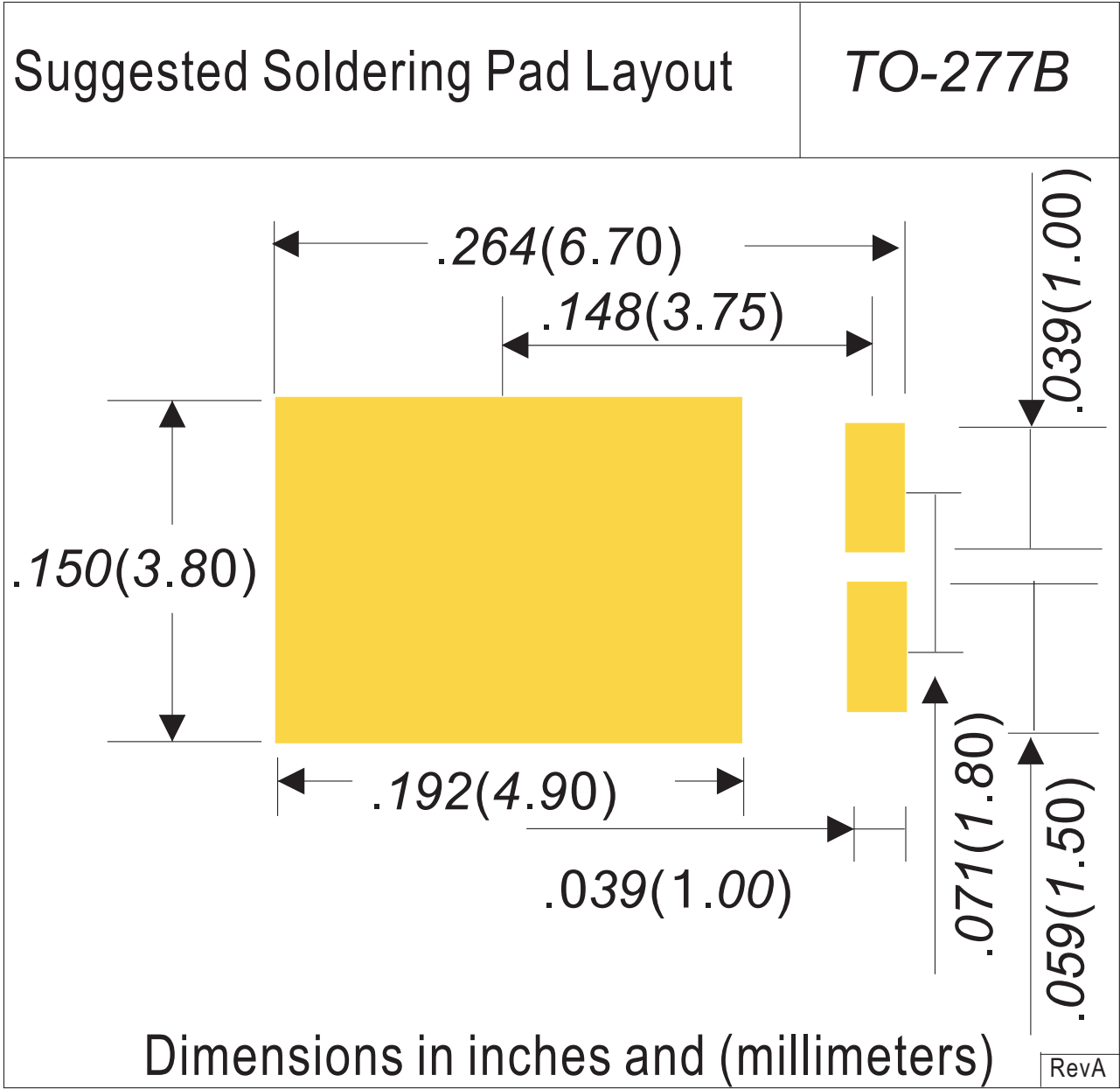
Outline Drawing

TO-277B



Dimensions in inches and (millimeters)

Rev.A



Ordering Information:

Device PN	Packing
MBR1045ULPS -T ⁽¹⁾ G ⁽²⁾ -WS	Tape&Reel: 3 Kpcs/Reel

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

(2) RoHS product for packing code suffix "G" ; Halogen free product for packing code suffix "H"

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