



MB2H60AL

Surface Mount Ultra Low I_R Schottky Barrier Rectifier

Voltage 60 V **Current** 2 A

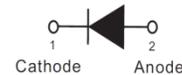
Features

- Low leakage current
- Ideal for automated placement
- Low power loss, high efficiency
- High surge current capability
- Lead free in compliance with EU RoHS 2.0
- Green molding compound as per IEC 61249 standard

Mechanical Data

- Case : SOD-123FL Package
- Terminals : Solderable per MIL-STD-750, Method 2026
- Approx. Weight : 0.0173 grams

SOD-123FL



Maximum Ratings and Thermal Characteristics (T_A = 25 °C unless otherwise noted)

PARAMETER	SYMBOL	LIMIT	UNITS
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	60	V
Maximum RMS Voltage	V _{RMS}	42	V
Maximum DC Blocking Voltage	V _{DC}	60	V
Maximum Average Forward Current	I _{F(AV)}	2	A
Peak Forward Surge Current : 8.3 ms Single Half Sine-Wave Superimposed On Rated Load	I _{FSM}	50	A
Typical Junction Capacitance Measured at 1 MHz And Applied V _R = 4 V	C _J	100	pF
Typical Thermal Resistance (Note 1)	R _{θJA}	200	°C/W
(Note 2)	R _{θJC}	32	
Operating Junction Temperature Range	T _J	-55~175	°C
Storage Temperature Range	T _{STG}	-55~175	°C



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Electrical Characteristics ($T_A = 25^\circ\text{C}$ unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNITS
Forward Voltage	V_F	$I_F = 0.5\text{ A}, T_J = 25^\circ\text{C}$	-	0.54	-	V
		$I_F = 2\text{ A}, T_J = 25^\circ\text{C}$	-	-	0.75	
		$I_F = 0.5\text{ A}, T_J = 125^\circ\text{C}$	-	0.39	-	
		$I_F = 2\text{ A}, T_J = 125^\circ\text{C}$	-	0.53	-	
Reverse Current ^(Note 3)	I_R	$V_R = 48\text{ V}, T_J = 25^\circ\text{C}$	-	0.05	-	μA
		$V_R = 60\text{ V}, T_J = 25^\circ\text{C}$	-	-	3	
		$V_R = 60\text{ V}, T_J = 125^\circ\text{C}$	-	0.15	-	mA

NOTES :

1. Mounted with minimum recommended pad size, PC Board FR4.
2. Mounted on a FR4 PCB, single-sided copper, with 100cm² copper pad area.
3. Short duration pulse test used to minimize self-heating effect.



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TYPICAL CHARACTERISTIC CURVES

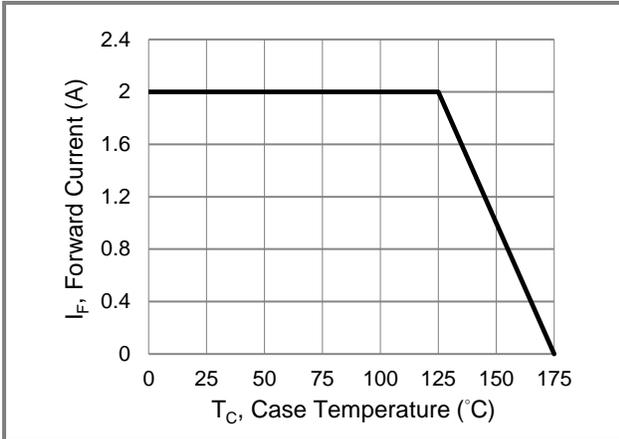


Fig.1 Forward Current Derating Curve

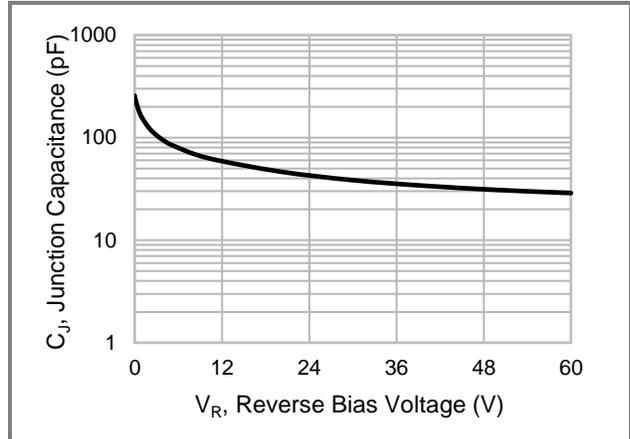


Fig.2 Typical Junction Capacitance

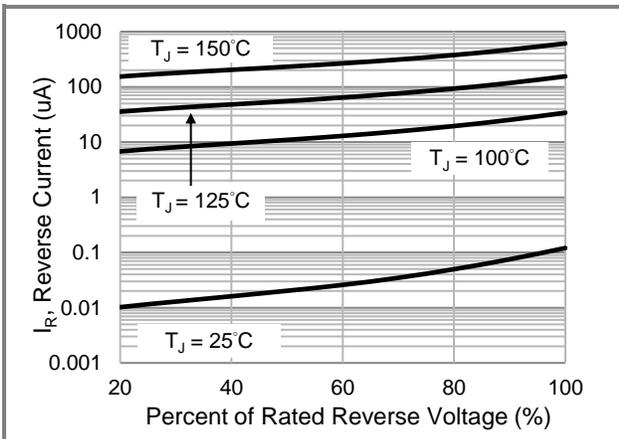


Fig.3 Typical Reverse Characteristics

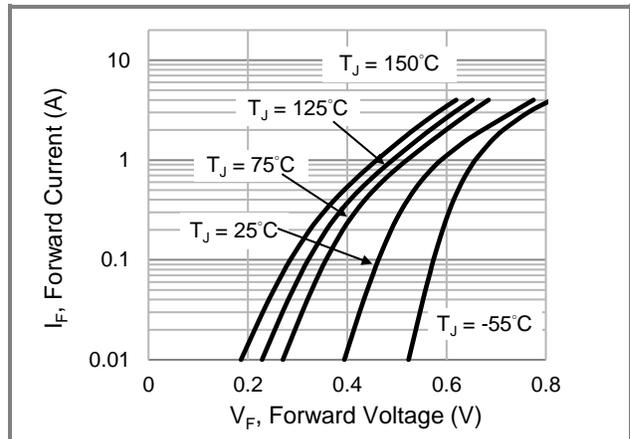


Fig.4 Typical Forward Characteristics

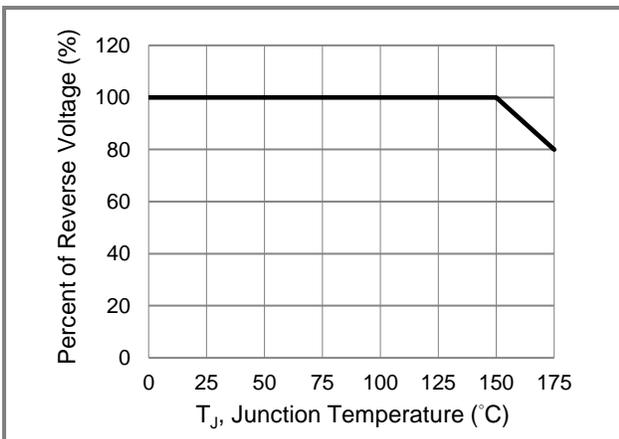


Fig.5 Operating Temperature Derating Curve

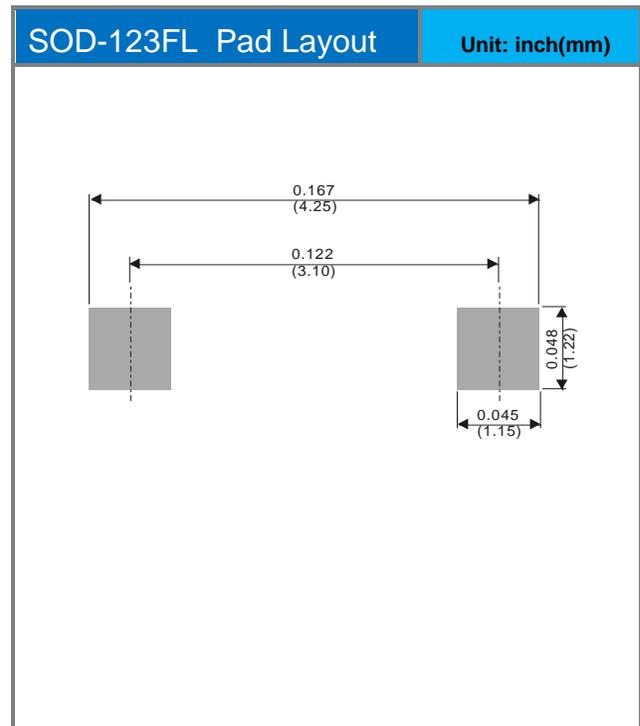
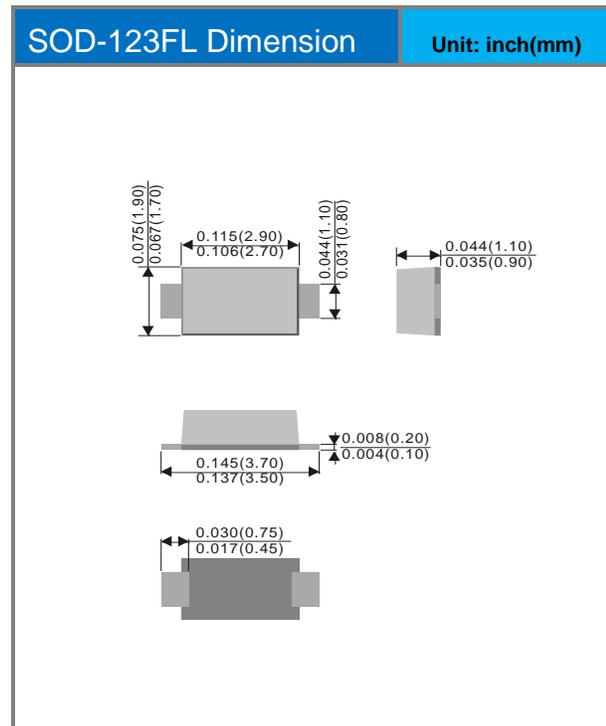


MB2H60AL

Part No. Packing Code Version

Part No. Packing Code	Package Type	Packing Type	Marking	Version
MB2H60AL_R1_00001	SOD-123FL	3K / 7" Reel	9AL	Halogen free RoHS compliant

Packaging Information & Mounting Pad Layout





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