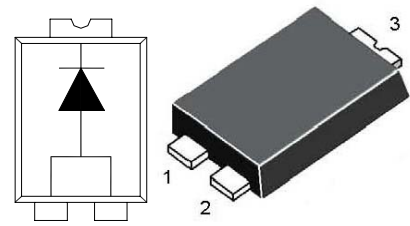


SDB1045

Surface Mount Schottky Barrier Rectifier

Features

- High forward surge capability
- Ultra low forward voltage drop
- Excellent high temperature stability



TO-277 Plastic Package

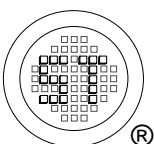
Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	45	V
Reverse Voltage	V_R	45	V
Average Rectified Output Current	I_O	10	A
Non-repetitive Peak Forward Surge Current ($t = 8.3 \text{ ms}$)	I_{FSM}	180	A
Thermal Resistance, Junction to Ambient ¹⁾	$R_{\theta JA}$	102	$^\circ\text{C/W}$
Operating Temperature Range	T_J	- 65 to + 150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	- 65 to + 175	$^\circ\text{C}$

¹⁾ FR-4 PCB, 2OZ. Copper, minimum recommended pad layout

Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 500 \mu\text{A}$	$V_{(BR)R}$	45	-	V
Forward Voltage at $I_F = 8 \text{ A}$ at $I_F = 10 \text{ A}$	V_F	-	0.51 0.55	V
Reverse Current at $V_R = 45 \text{ V}$ at $V_R = 45 \text{ V}, T_J = 100^\circ\text{C}$ at $V_R = 45 \text{ V}, T_J = 150^\circ\text{C}$	I_R	-	0.45 18 100	mA



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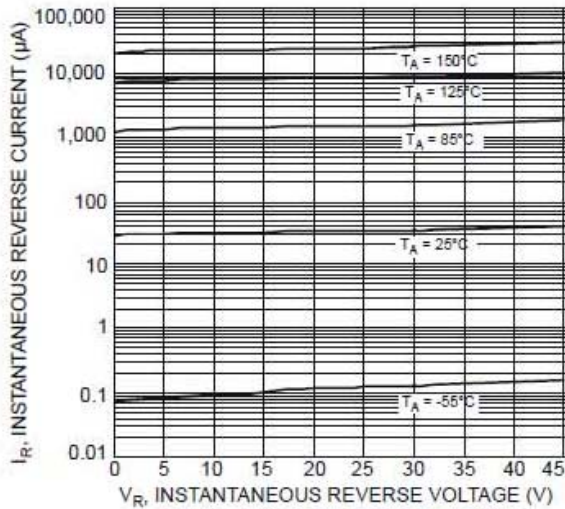


Figure 1 Typical Reverse Characteristics

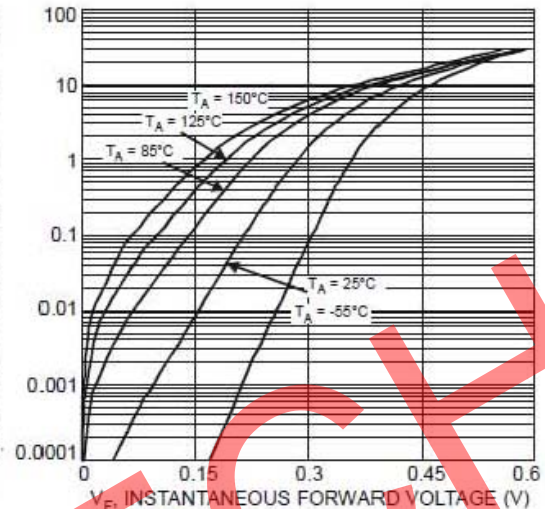


Figure 2 Typical Forward Characteristics

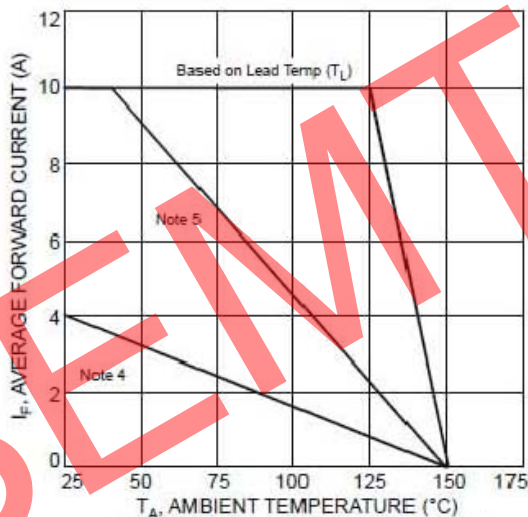
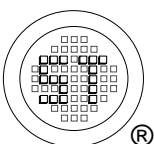


Figure 3 Forward Current Derating Curve

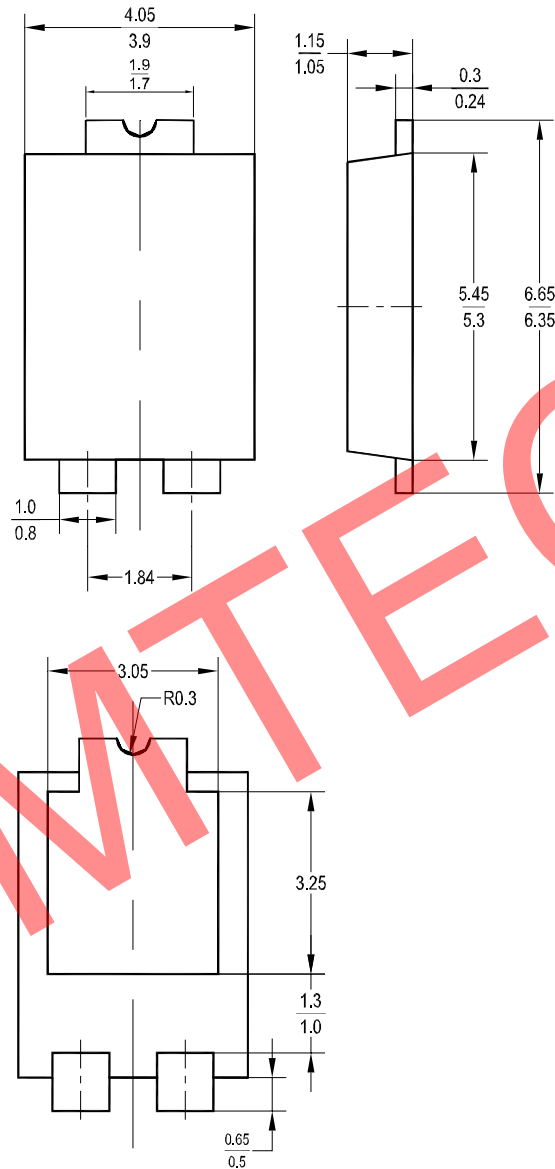


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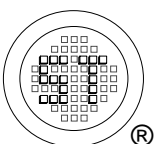


SDB1045

TO-277 PACKAGE OUTLINE



Dimensions in mm



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Dated: 08/04/2013 Rev: 02