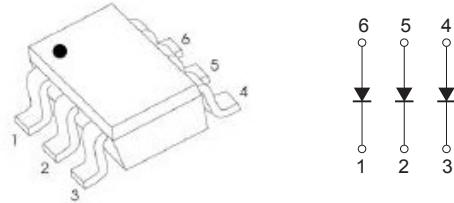


175mA Plastic-Encapsulate Schottky Barrier Diode - 40V
PRIMARY CHARACTERISTICS

V_{RRM}	40V
I_O	175mA
$V_F@I_F=20mA$	0.37V
$T_{J,Max}$	125°C

SCHEMATIC DIAGRAM
SOT-363 PACKAGE

FEATURES

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Fast Switching
- Low Leakage Current
- Moisture Sensitivity Level 1

MECHANICAL DATA

- Case : Molded plastic, SOT-363
- Polarity : Shown above
- Terminals : Plated terminals, solderable per MIL-STD-750, Method 2026
- Epoxy : UL94-V0 rated flame retardant

Maximum Ratings and Electrical Characteristics, Single Diode @Ta=25°C

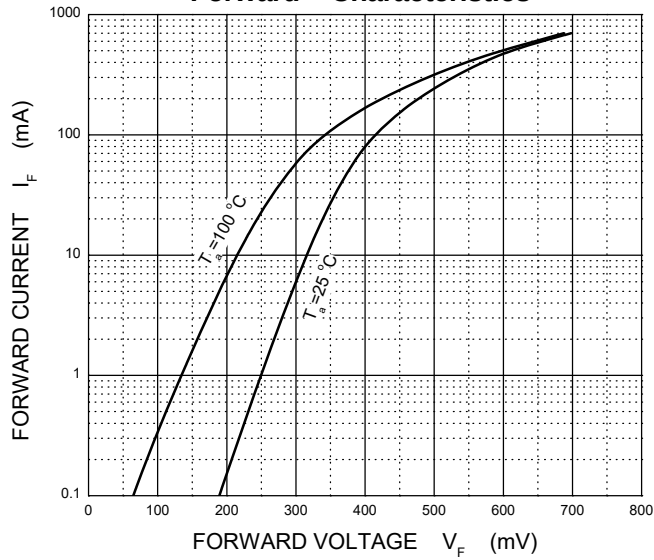
		Limit	Unit
Peak Repetitive Peak Reverse Voltage	V_{RRM}	40	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	28	V
Forward Continuous Current	I_{FM}	350	mA
Average Rectified Current	I_O	175	mA
Non-repetitive Peak Forward Surge Current@t=8.3ms	I_{FSM}	2	A
Power Dissipation	P_d	200	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	500	°C/W
Operating Junction Temperature Range	T_J	-40 ~ +125	°C
Storage Temperature Range	T_{STG}	-55 ~ +150	°C

Electrical Ratings @Ta=25°C

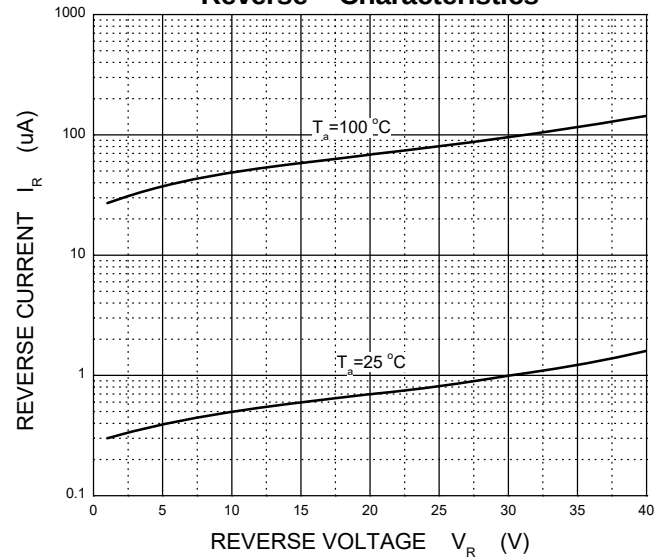
Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse breakdown voltage	$V_{(BR)}$	40			V	$I_R=100\mu A$
Forward voltage	V_F			0.37 0.50	V	$I_F=20mA$ $I_F=100mA$
Reverse current	I_R			2.0 5.0	μA	$V_R=10V$ $V_R=30V$
Capacitance between terminals	C_T		50		pF	$V_R=0V, f=1.0MHz$
Reverse recovery time	t_{rr}		10		ns	$I_F=I_R=200mA$ $I_{rr}=0.1I_R, R_L=100\Omega$

Typical Characteristics

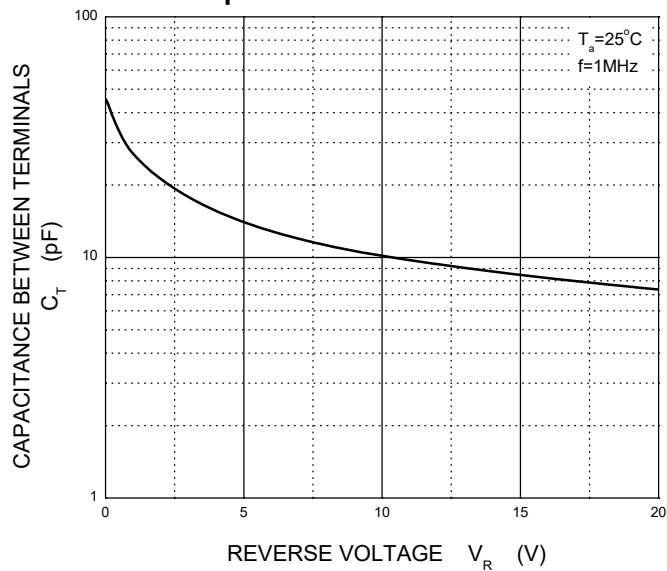
Forward Characteristics



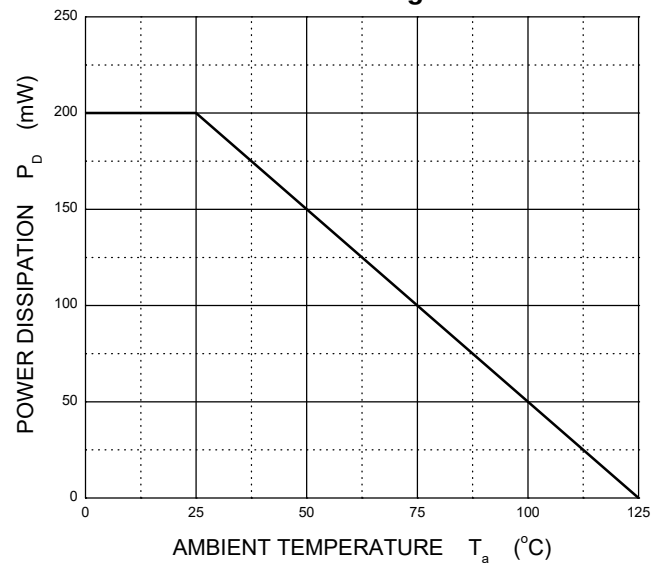
Reverse Characteristics



Capacitance Characteristics



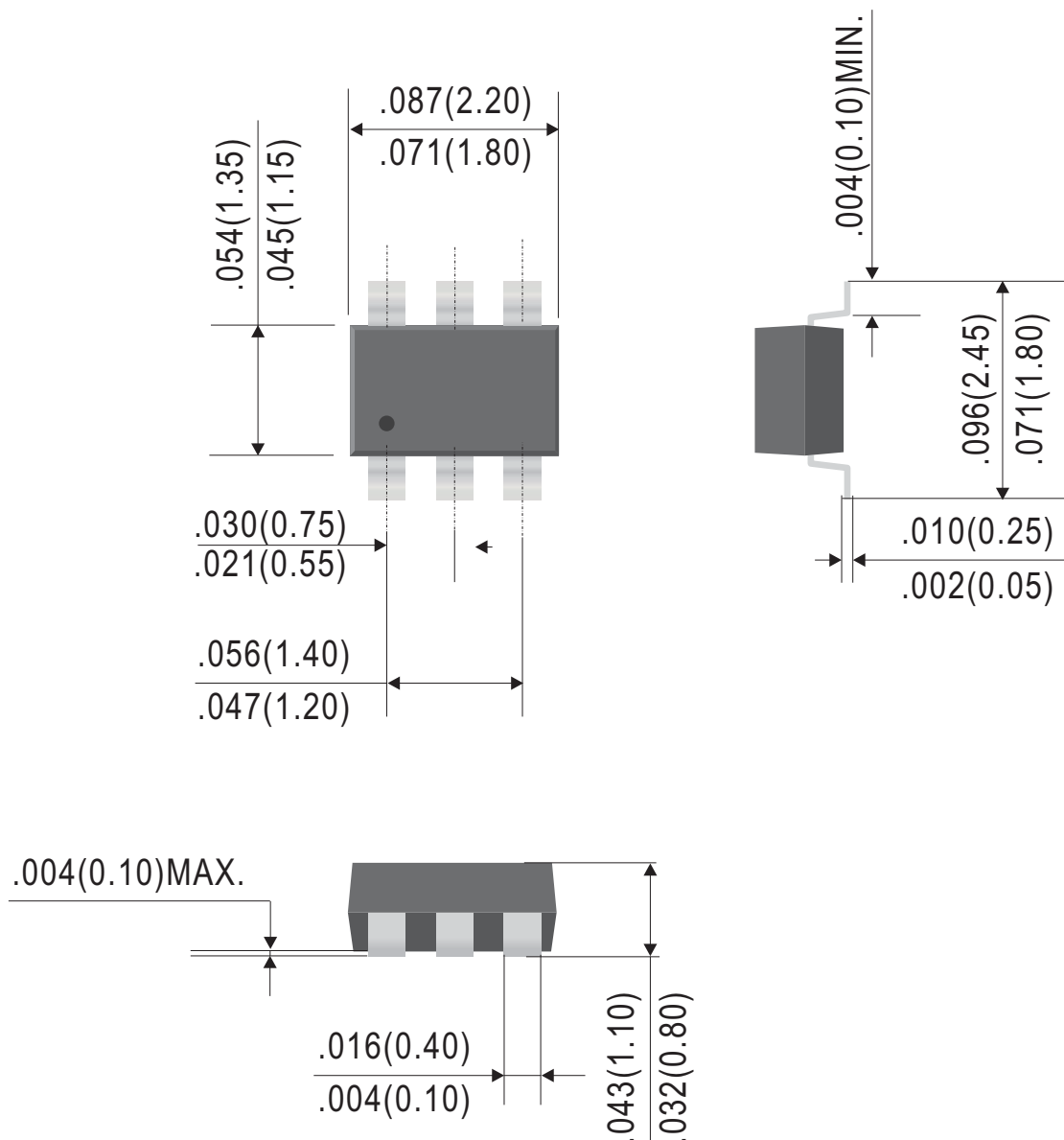
Power Derating Curve





Outline Drawing

SOT-363



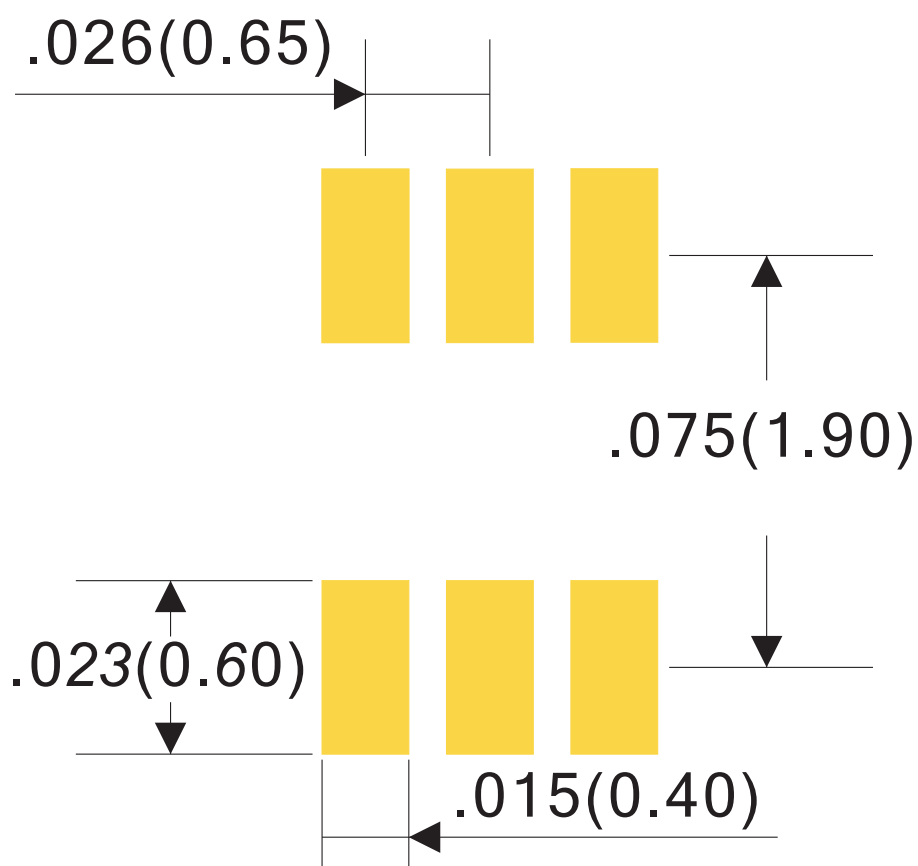
Dimensions in inches and (millimeters)

Rev.E



Suggested Soldering Pad Layout

SOT-363



Dimensions in inches and (millimeters)

RevB

Ordering Information:

Device PN	Marking	Packing
SD103ATW -T ⁽¹⁾ G ⁽²⁾ -WS ⁽³⁾	KLL	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"

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

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