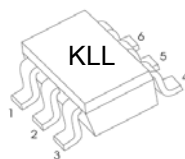


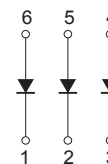
GSD103ATW Schottky Barrier Diode

Features

- Low Forward Voltage Drop
- Guard Ring Construction for Transient Protection
- Fast Switching
- Low Leakage Current



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Schematic Diagram

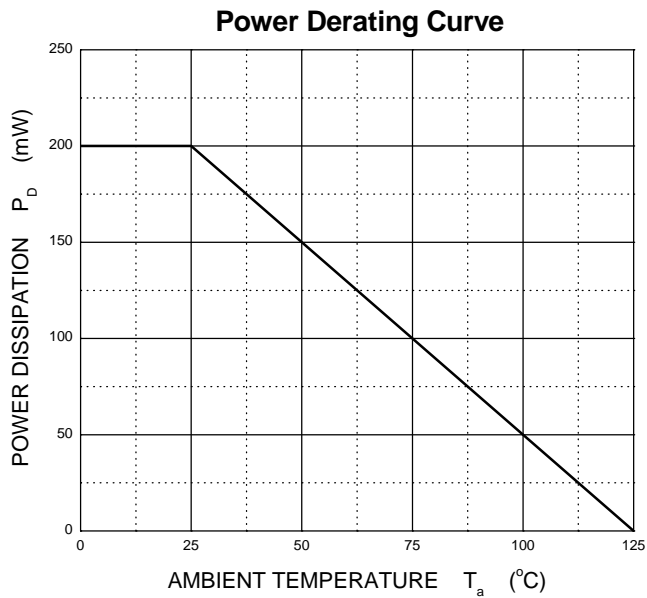
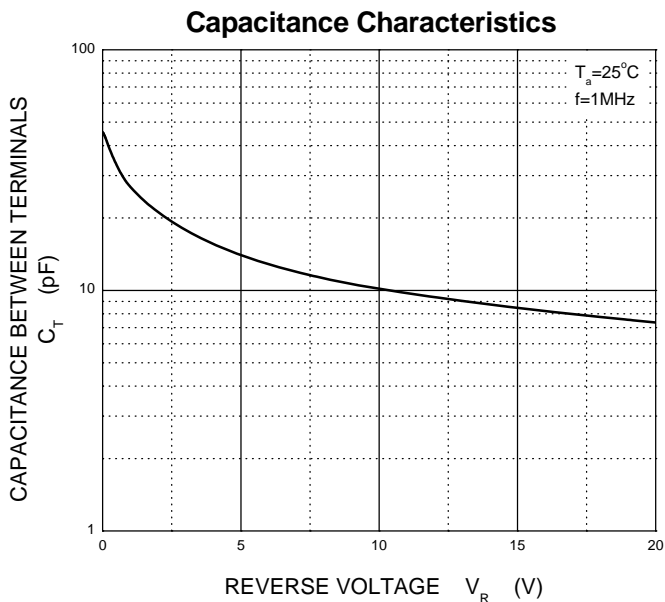
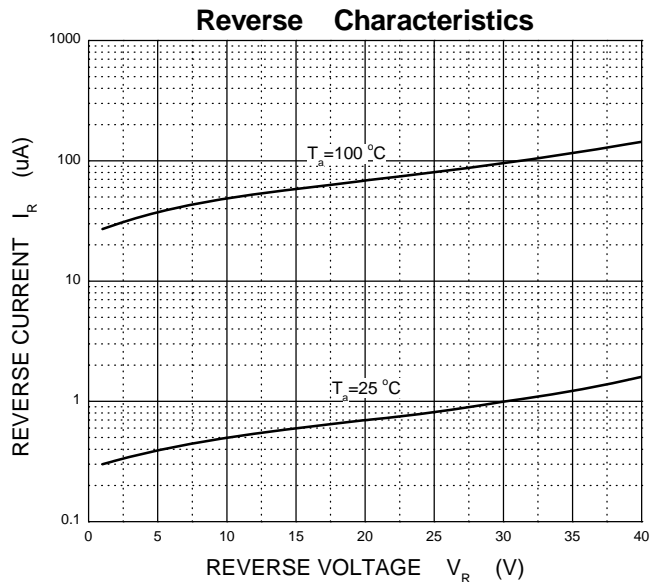
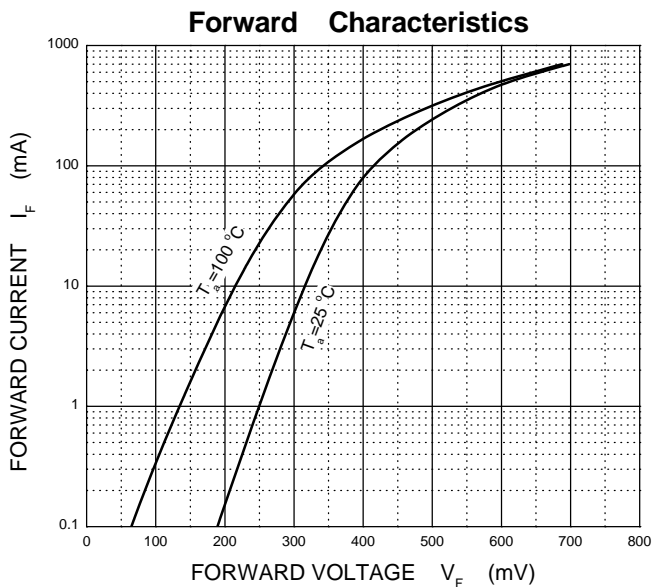
Maximum Ratings and Electrical Characteristics (Single Diode @ $T_A=25^\circ\text{C}$)

Parameter	Symbol	Value	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
Repetitive Peak Forward Current @ $t_s \leq 10\text{ms}$	I_{FSM}	1	A
Power Dissipation	P_d	200	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	500	$^\circ\text{C}/\text{W}$
Junction Temperature	T_J	125	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55 to +150	$^\circ\text{C}$

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

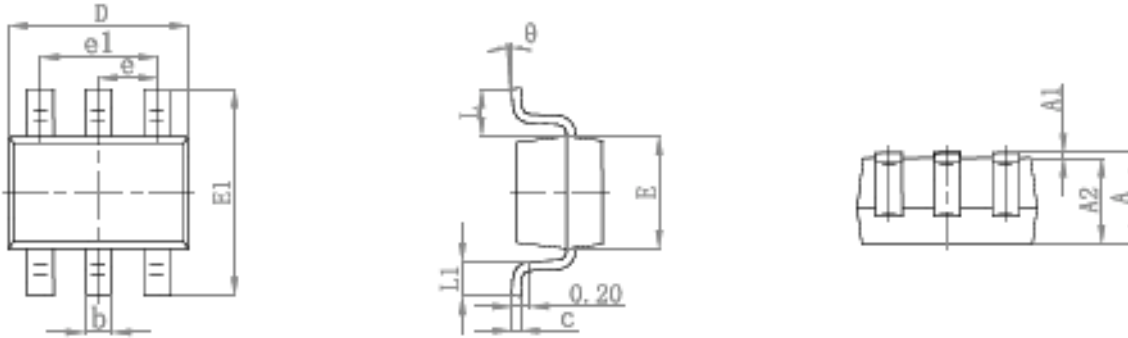
Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse Breakdown Voltage	$V_{(BR)}$	40			V	$I_R=100\mu\text{A}$
Forward Voltage	V_F			0.37 0.50	V	$I_F=20\text{mA}$ $I_F=100\text{mA}$
Reverse Current	I_R			2.0 5.0	μA	$V_R=10\text{V}$ $V_R=30\text{V}$
Capacitance Between Terminals	C_T		50	pF	V	$V_R=0\text{V}, f=1.0\text{MHz}$
Reverse Recovery Time	t_{rr}		10		ns	$I_F=I_R=200\text{mA}$ $I_{rr}=0.1I_R, R_L=100\Omega$

Typical Characteristic Curves



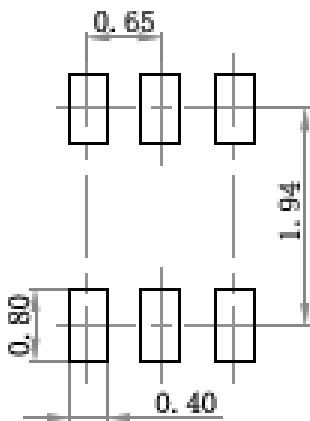
Package Outline Dimensions

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Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.150	0.350	0.006	0.014
c	0.100	0.150	0.004	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.400	0.085	0.094
e	0.650 TYP		0.026 TYP	
e1	1.200	1.400	0.047	0.055
L	0.525 REF		0.021 REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°

Suggested Pad Layout



- Note:
1. Controlling dimension: in millimeters.
 2. General tolerance: $\pm 0.05\text{mm}$.
 3. The pad layout is for reference purposes only.