



## Surface Mount Schottky Barrier Diode



Forward Current - 0.2 A  
Reverse Voltage - 30 V

## Description

- Low Forward Voltage
- High Current Capability
- Fast Switching Speed
- Surface Mount Device Type

## Mechanical Data

- Case: SOT23 Package
- Case Material: "Green" Molding Compound UL Flammability Classification Rating 94V-0
- Terminals: Matte tin plated, solderable per MIL-STD-750, method 2026
- Component in accordance to RoHS
- Halogen Free

Note: Products with logo  or  are made by HY Electronic (Cayman) Limited.

## Ordering Information

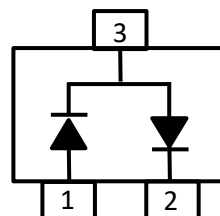
- Package :SOT23
- Reel Size :7 (inches)
- Quantity Per Reel :3,000/Tape & Reel
- Quantity One Box :45,000/Tape & Reel

## Package Outline

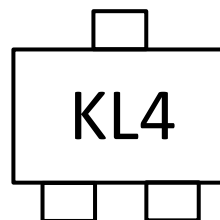


SOT23 Top View

## Device Schematic &amp; PIN Configuration



## Product Type Marking Code



## Maximum Ratings (@TA = +25°C, unless otherwise specified.)

## Absolute Ratings

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	30	V
Forward Rectified Current	$I_{FM}$	200	mA
Peak Forward Surge Current @ $t = 8.3\text{ms}$	$I_{FSM}$	600	mA
Power Dissipation	$P_D$	200	mW
Storage Temperature Range	$T_{STG}$	-50 to +150	°C
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	500	°C/W
Junction Temperature	$T_J$	125	°C

## Electrical Characteristics

Parameter	Test Conditions	Symbol	Min	Typ	Max	Unit
Reverse Voltage	$I_R = 100\mu\text{A}$	$V_{BR}$	30	—	—	V
Reverse Current	$V_R = 25\text{V}$	$I_R$	—	—	2	$\mu\text{A}$
Forward Voltage	$I_F = 0.1\text{mA}$	$V_F$	—	—	0.24	V
	$I_F = 1\text{mA}$		—	—	0.32	
	$I_F = 10\text{mA}$		—	—	0.40	
	$I_F = 30\text{mA}$		—	—	0.50	
	$I_F = 100\text{mA}$		—	—	1.00	
Junction Capacitance	$V_R = 1\text{V}, F = 1\text{MHz}$	$C_J$	—	—	10	pF
Reverse Recovery time	$I_F = I_R = 10\text{mA}$ $I_{RR} = 0.1 \times I_R, R_L = 100\Omega$	$T_{RR}$	—	—	5	ns



## Rating and Characteristic Curves

FIG.1 - Forward Characteristics

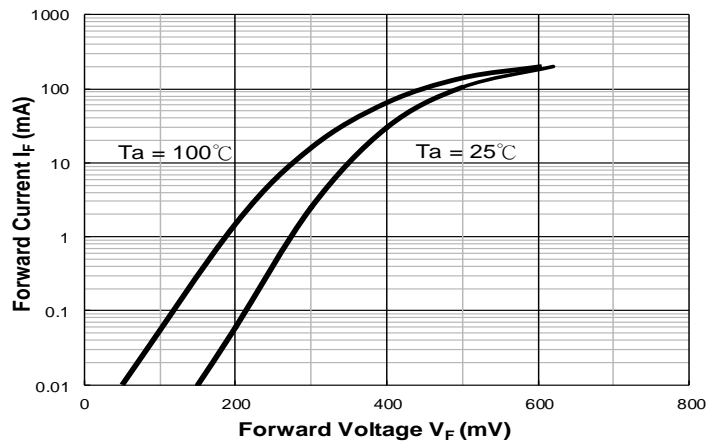


FIG.2 - Reverse Characteristics

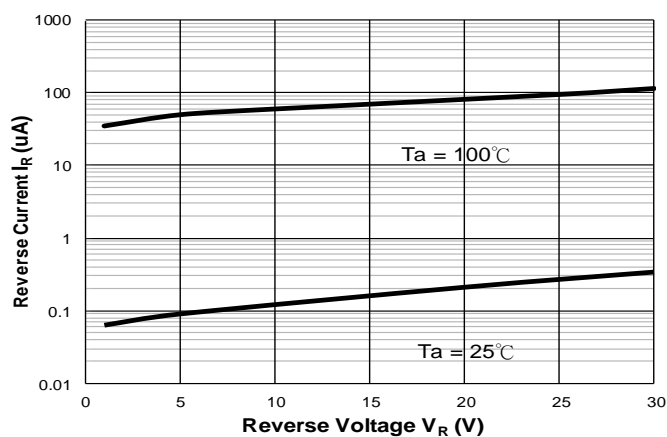


FIG.3 - Power Derating Curve

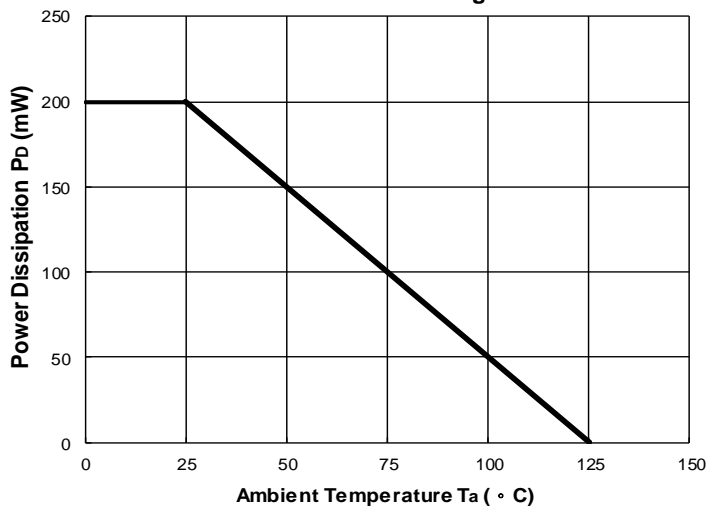
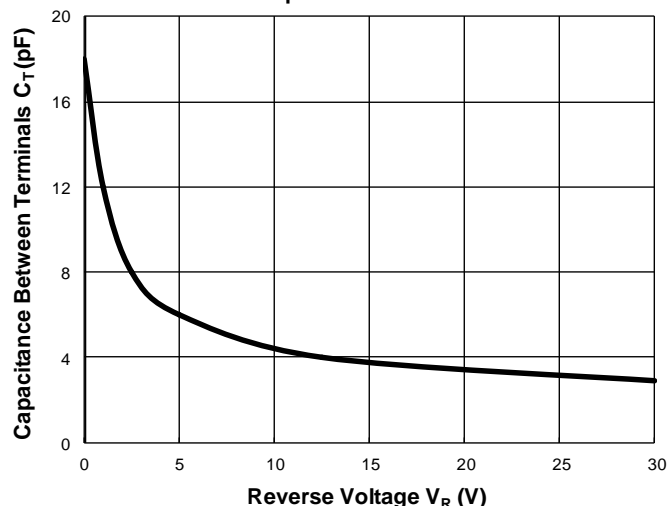
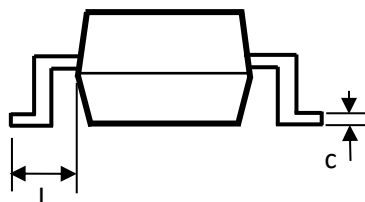
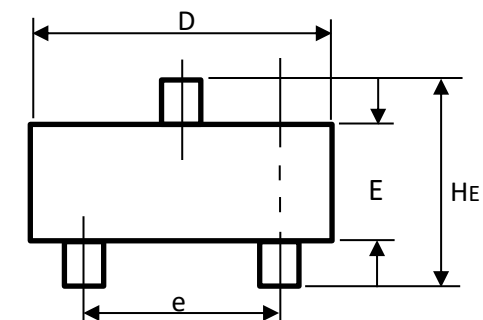


FIG.4 - Capacitance Characteristics

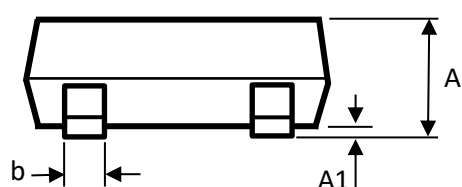




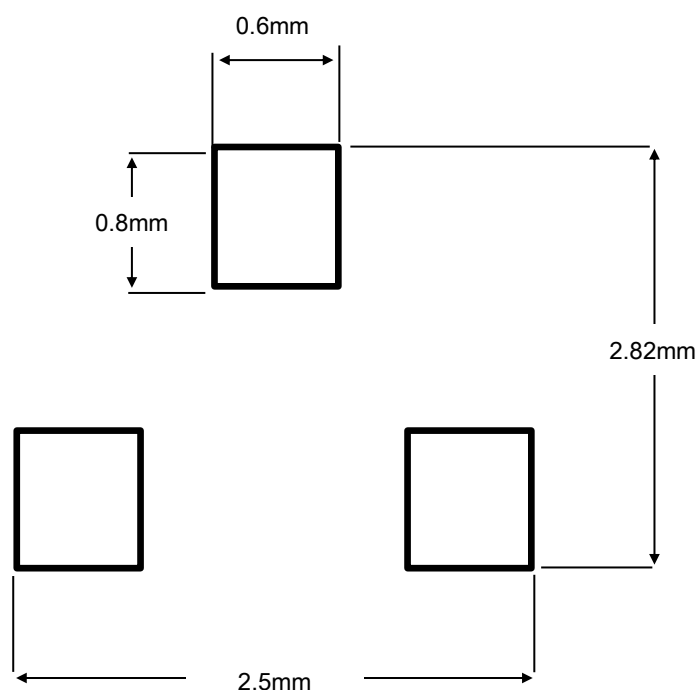
## Package Outline Dimensions



SOT23 Package		
Dim	Min	Max
A	0.90	1.15
A1	0.00	0.10
b	0.30	0.50
c	0.08	0.15
D	2.80	3.00
E	1.20	1.40
e	1.80	2.00
L	0.55 REF	
HE	2.25	2.55
All Dimensions in mm		



## Suggested Soldering Pad Layout



### Note:

1. The pad layout is for reference purposes only.
2. General tolerance  $\pm 0.05\text{mm}$



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