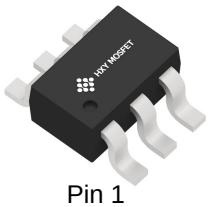
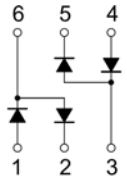
CDBV6-54SD-G
SCHOTTKY BARRIER DIODE

Features

- Low Forward Voltage Drop
- Fast Switching
- Small Surface Mount Package
- PN Junction Guard Ring for Transient and ESD Protection
- Available in Lead Free Version



Pin 1
SOT-363



Package Marking and Ordering Information

Product ID	Pack	Marking	Qty(PCS)
CDBV6-54SD-G	SOT-363	KL8	3000

Maximum Ratings (Ta=25°C unless otherwise noted)

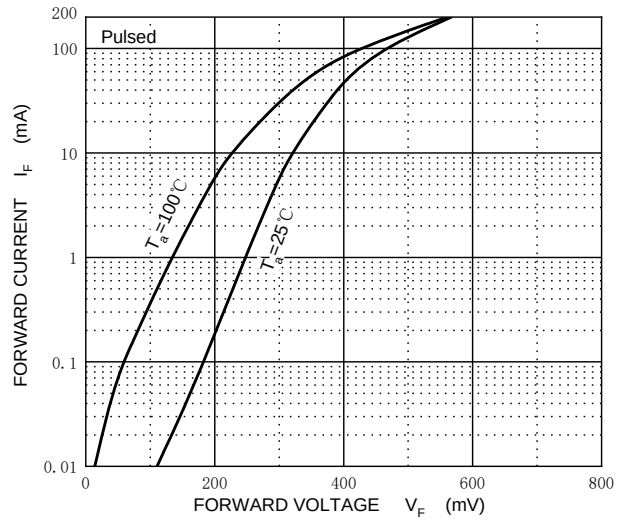
Symbol	Parameter	Value	Unit
V_{RRM}	Repetitive Peak Reverse Voltage	30	V
V_{RWM}	Peak Working Reverse Voltage		
V_R	DC Blocking Voltage		
I_O	Forward Continuous Current	200	mA
I_{FRM}	Repetitive Peak Forward Current	300	mA
I_{FSM}	Non-repetitive Peak Forward Surge Current @t=8.3ms	600	
P_D	Power Dissipation	200	mW
$R_{\Theta JA}$	Thermal Resistance From Junction To Ambient	500	°C/W
T_j	Operating Junction Temperature Range	-40 ~ +125	°C
T_{stg}	Storage Temperature Range	-55 ~ +150	°C

Electrical Characteristics(Ta=25°C unless otherwise specified)

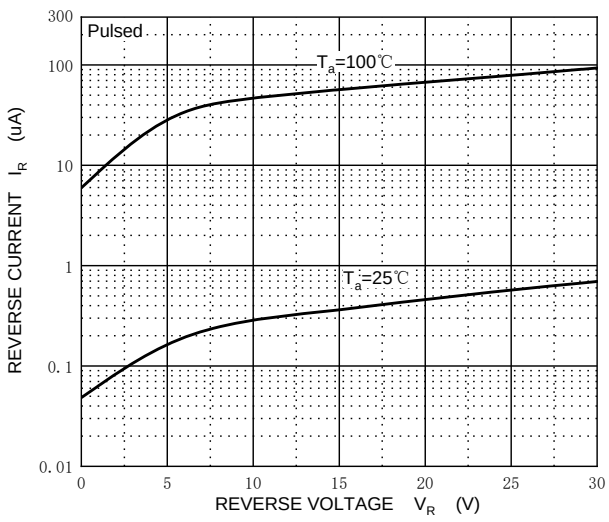
Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse voltage	$V_{(BR)}$	I_R=100μA	30		V
Reverse current	I_R	V_R=25V		2	μA
Forward voltage	V_F	I_F=1mA		320	mV
		I_F=10mA		400	
		I_F=30mA		500	
		I_F=100mA		1000	
Total capacitance	C_{tot}	V_R=1V,f=1MHz		10	pF
Reverse recovery time	t_{rr}	I_F= I_R=10mA, I_{rr}=0.1×I_R, R_L=100Ω		5	ns

Typical Characteristics

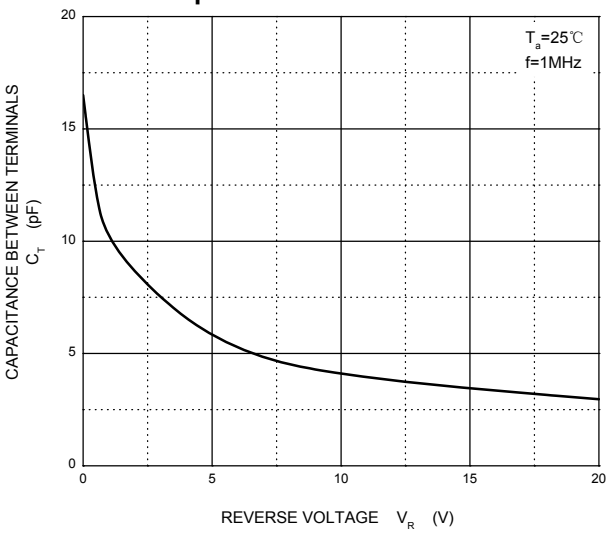
Forward Characteristics



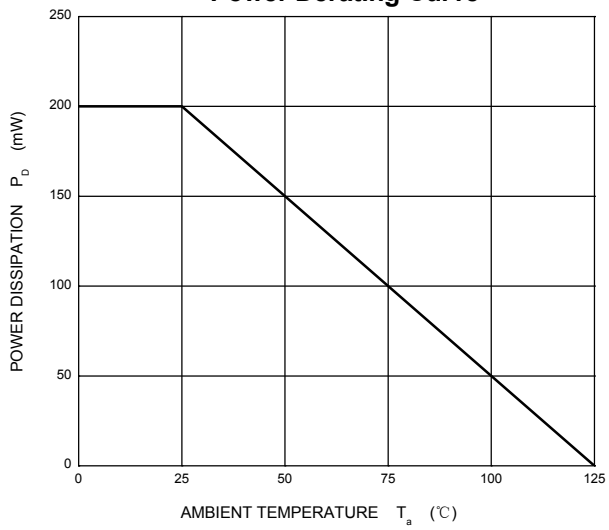
Reverse Characteristics



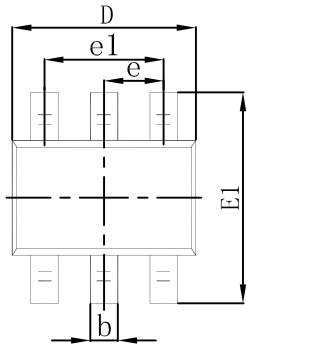
Capacitance Characteristics

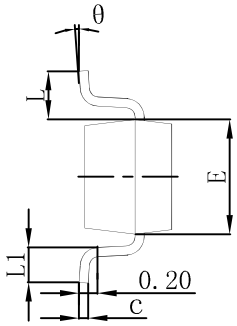


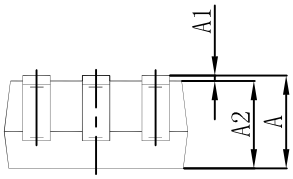
Power Derating Curve



SOT-363 Package Outline Dimensions

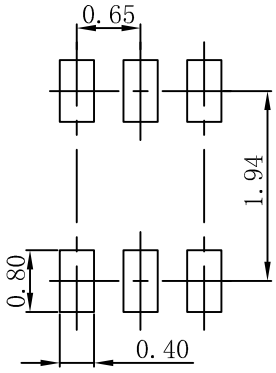






Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.150	0.350	0.006	0.014
c	0.100	0.150	0.004	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.400	0.085	0.094
e	0.650 TYP		0.026 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°

SOT-363 Suggested Pad Layout



Note:
1.Controlling dimension:in millimeters.
2.General tolerance:± 0.05mm.
3.The pad layout is for reference purposes only.

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