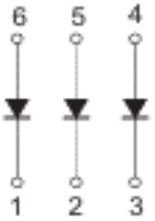
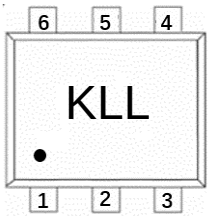
Features

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

SOT-363 top view



Schematic diagram



Marking and pin assignment

Pb-Free RoHS Halogen-Free

Maximum Ratings(T_a=25℃ unless otherwise noted)

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

ELECTRICAL CHARACTERISTICS(Ta=25℃ unless otherwise specified)

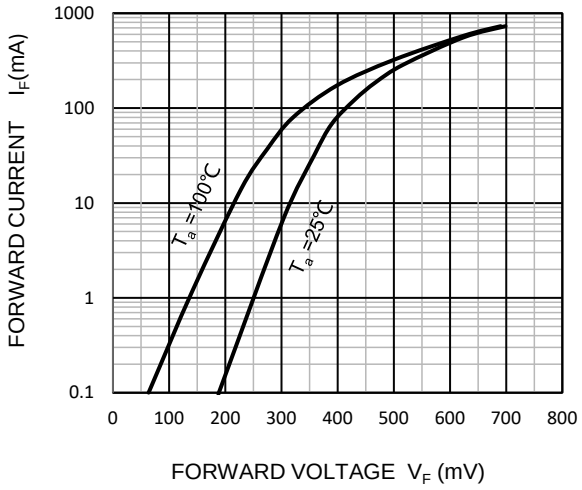
Symbol	Parameter	Condition	Min	Typ	Max	Unit
$V_{(BR)}$	Reverse breakdown voltage	I_R=100μA	40	--	--	V
I_R	Reverse current	V_R=10V	--	--	2	μA
		V_R=30V	--	--	5	μA
V_F	Forward voltage	I_F=20mA	--	--	0.37	V
		I_F=100mA	--	--	0.5	V
C_T	Capacitance between terminals	V_R=0,f=1MHz	--	50	--	pF
t_{rr}	Reverse recovery time	I_F= I_R =200mA, I_{rr}=0.1*I_R,R_L=100Ω	--	10	--	ns

Ordering Information (Example)

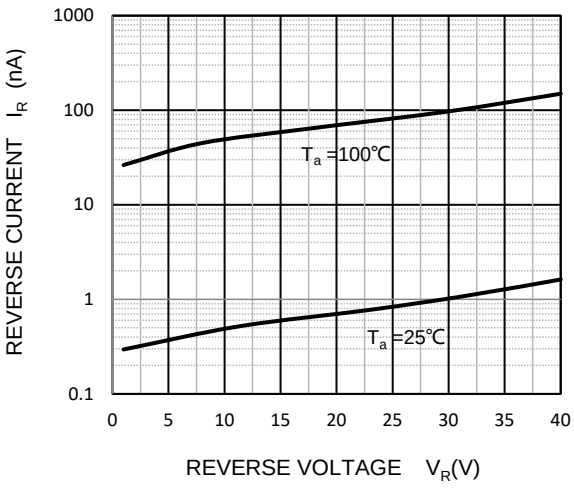
Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
SD103ATW	SOT-363	KLL	3,000	45,000	180,000	7"reel

Typical Operating Characteristics

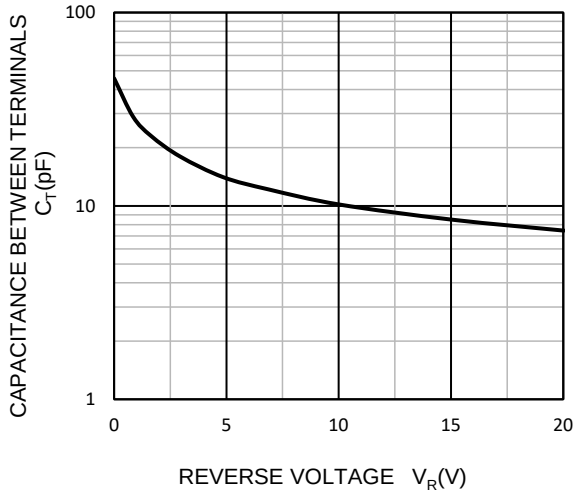
Forward Characteristics



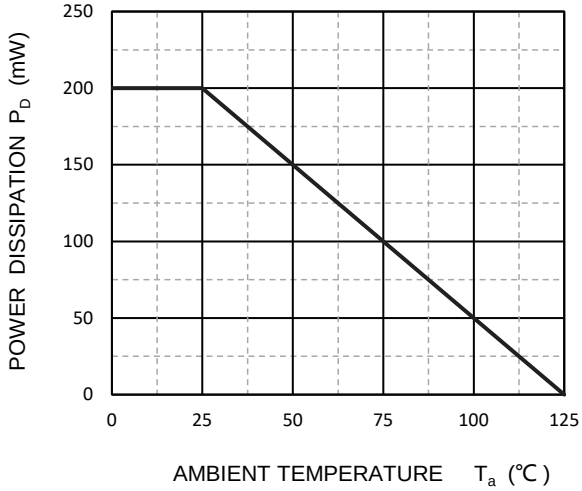
Reverse Characteristics



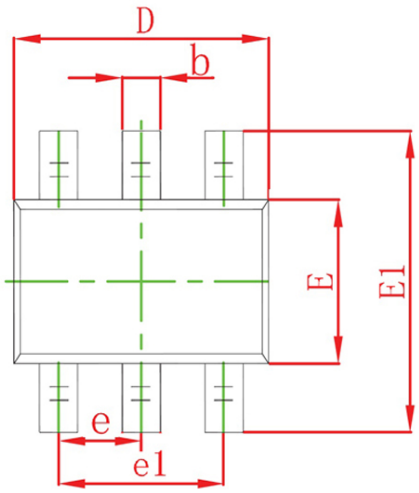
Capacitance Characteristics

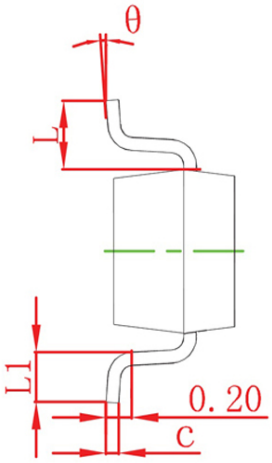


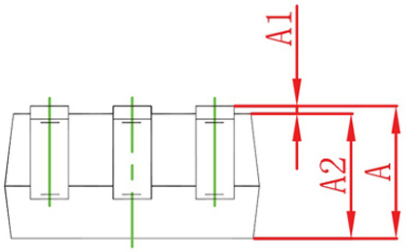
Power Derating Curve



SOT-363 Package information







Symbol	Dimensions in Millimeters(mm)		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	0.650TYP		0.026TYP	
e1	1.200	1.400	0.047	0.055
L	0.525REF		0.021REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°