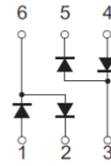
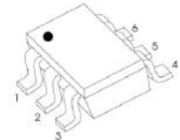


Feature

- Fast Switching Speed
- Ultra-Small Surface Mount Package
- For General Purpose Switching Applications
- High Conductance


Circuit Diagram

SOT-363(Top View)
Mechanical Characteristics

- SOT-363 Small Outline Plastic Package
- Epoxy UL: 94V-0
- Mounting Position: Any

Absolute maximum rating@25°C

Parameter	Symbol	Value	Units
Peak Repetitive Peak Reverse Voltage	V_{RRM}	75	V
Working Peak Reverse Voltage	V_{RWM}	75	V
DC Blocking Voltage	V_R	75	V
Average Rectified Output Current	I_O	150	mA
Forward Continuous Current	I_{FM}	300	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I_{FSM}	2.0	A
Power Dissipation	P_{tot}	200	mW
Storage Temperature	T_d	-55~+150	°C
Junction Temperature	T_j	125	°C
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	625	°C/W

Electrical characteristics per line@25°C

Parameter	Symbol	Test Condition	Min	Max	Units
Reverse Breakdown Voltage	V_{BR}	$I_R=2.5\mu A$	75	-	V
Forward Voltage	V_F	$I_F=1mA$	-	0.715	V
		$I_F=10mA$	-	0.855	
		$I_F=50mA$	-	1.0	
		$I_F=150mA$	-	1.25	
Reverse Leakage Current	I_R	$V_R=75V$	-	2.5	μA
		$V_R=20V$	-	1.5	
Capacitance	C_j	$V_R=0V, f=1MHz$	-	2.0	pF
Reverse Recovery Time	t_{rr}	$I_F = 10mA, I_R = 10A, I_{rr} = 0.1 \times 1R$	-	4.0	ns

Typical Characteristics

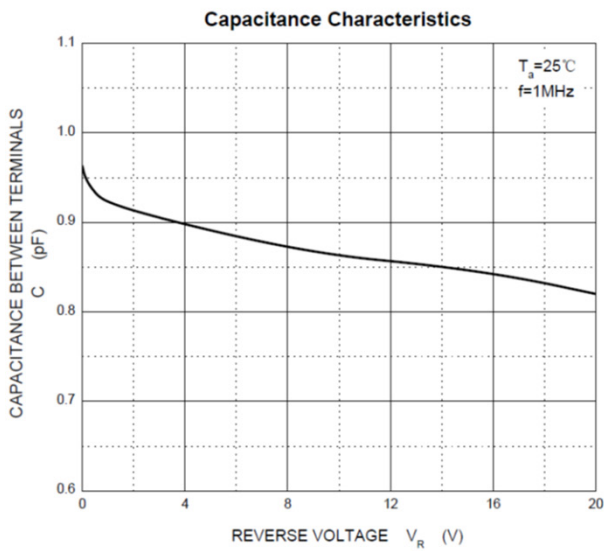


Fig.1 Typical Junction Capacitance

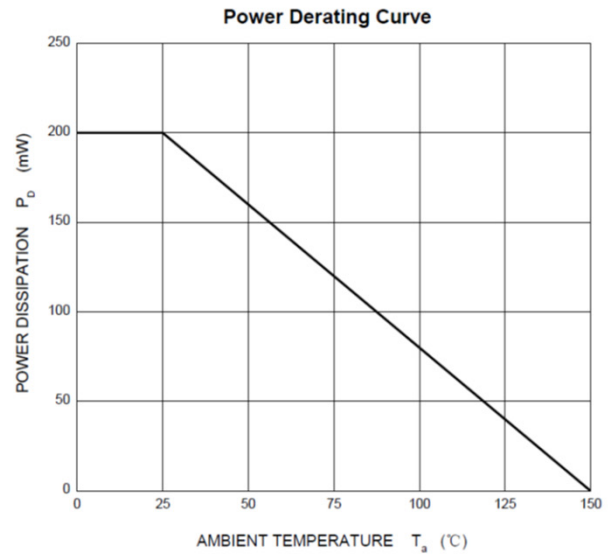


Fig.2 Power Derating Curve

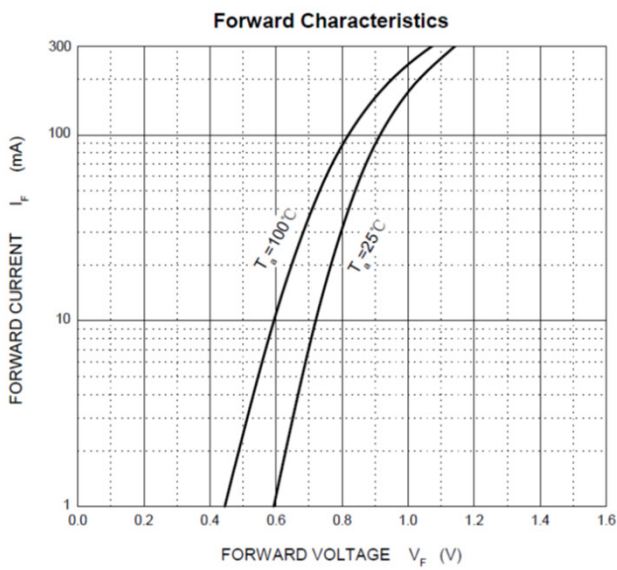


Fig.3 Typical Instantaneous Forward Characteristics

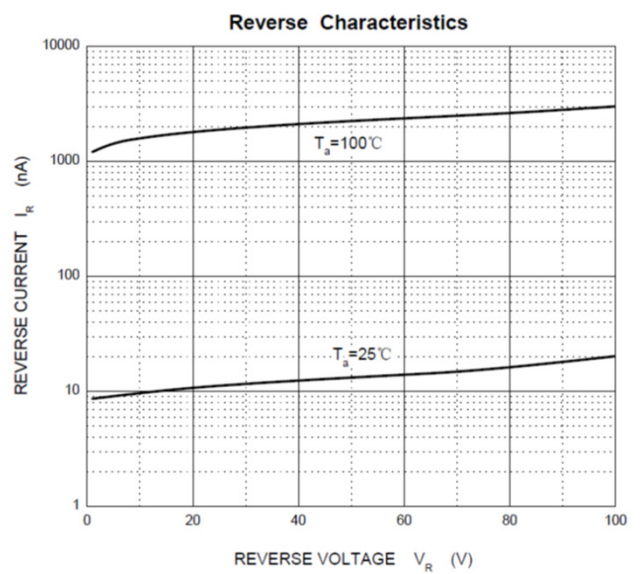
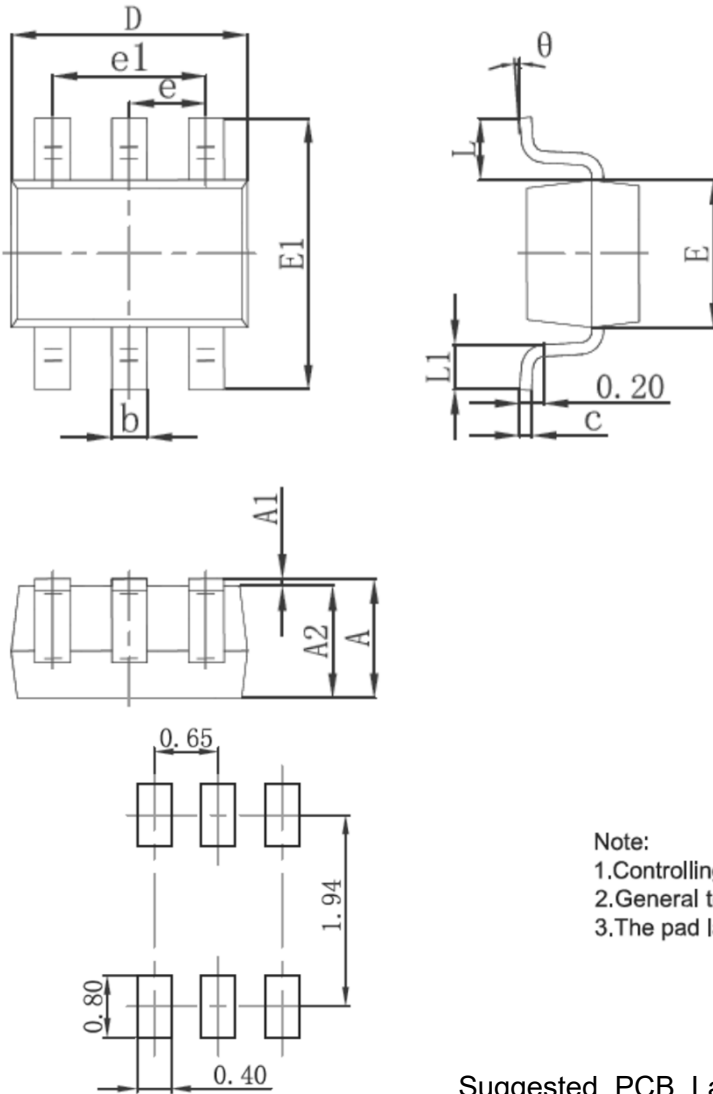


Fig.4 Typical Reverse Characteristics

Switching Diode

Product dimension (SOT-363)



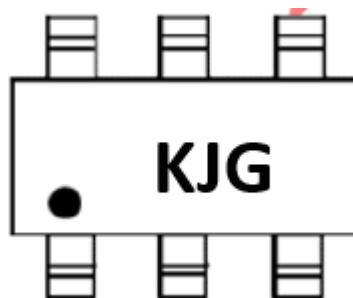
Dim	Millimeters	
	Min	Max
A	0.90	1.10
A1	0.00	0.10
A2	0.90	1.00
b	0.15	0.35
c	0.10	0.15
D	2.00	2.20
E	1.15	1.35
E1	2.15	2.4
e	0.65 Ref.	
e1	1.20	1.40
L	0.525 Ref.	
L1	0.26	0.46
\angle	0°	8°

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


Suggested PCB Layout

Unit: mm

Marking




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