High Speed Switching Diode

Forward Current - 300mA
Reverse Voltage - 75V

Features

- Power Dissipation of 200mW
- Fast Switching Device(TRR<4ns)
- High Stability and High Reliability
- For General Purpose Switching Applications
- Ultra-Small Surface Mount Package

Mechanical Data

- Case: SOT363 Package
- Case Material: “Green” Molding Compound
  UL Flammability Classification Rating 94V-0
- Halogen Free

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

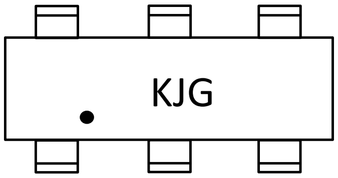
Ordering Information

- Package :SOT363
- Reel Size :7 (inches)
- Quantity Per Reel :3,000 pcs
- Quantity One Box :45,000 pcs
- Quantity One Carton :180,000 pcs

Package Outline

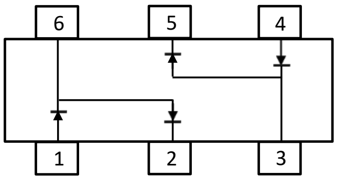
SOT363 Top View

Marking Information



"KJG" = Product Type Marking Code

Device Schematic & PIN Configuration



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

Absolute Ratings

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	75	V
Working Peak Reverse Voltage	V_{RWM}	75	V
Average Rectified Current	I_O	150	mA
Forward Continuous Current	I_{FM}	300	mA
Peak Forward Surge Current @ t=8.3ms	I_{FSM}	2	A
Power Dissipation	P_D	200	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	625	°C/W
Junction Temperature Range	T_J	-55 to +150	°C
Storage Temperature Range	T_S	-55 to +150	°C

Electrical Characteristics

Parameter	Test Conditions	Symbol	Min	Typ	Max	Unit
Reverse Voltage	I_R=2.5uA	V_{BR}	75	-	-	V
Reverse Current	V_R=20V	I_R	-	-	25	nA
	V_R=75V		-	-	2.5	uA
Forward Voltage	I_F=1mA	V_F	-	-	0.715	V
	I_F=10mA		-	-	0.855	
	I_F=50mA		-	-	1.00	
	I_F=150mA		-	-	1.25	
Reverse Recovery Time	I_F=I_R=10mA I_{RR}=0.1*I_R,R_L=100Ω	T_{RR}	-	-	4	ns
Total Capacitance	V_R = 0V, F = 1MHz	C_T	-	-	2	pF

Rating and Characteristic Curves

FIG.1 - Forward Characteristics

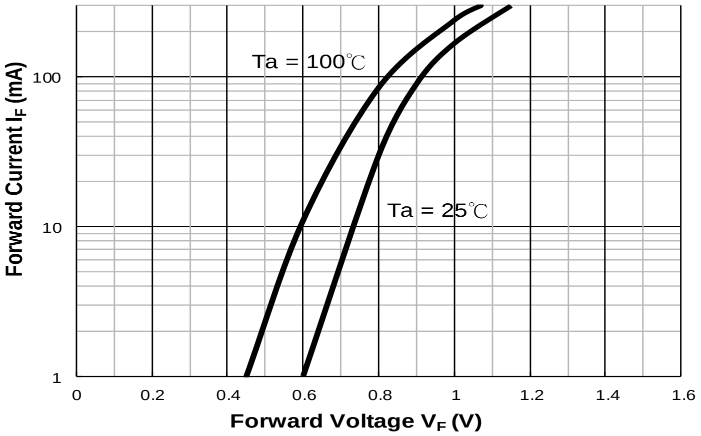


FIG.2 - Reverse Characteristics

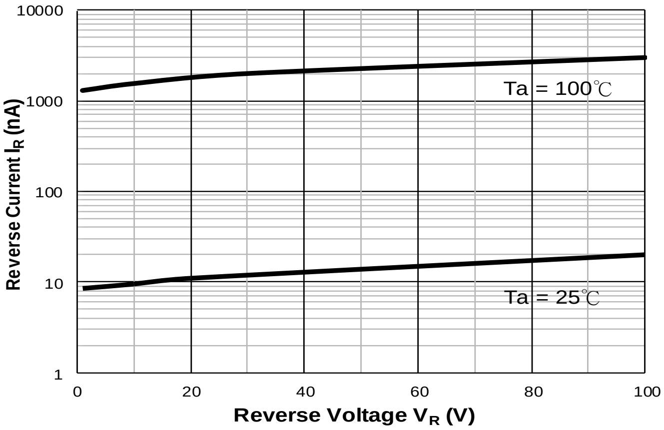


FIG.3 - Power Derating Curve

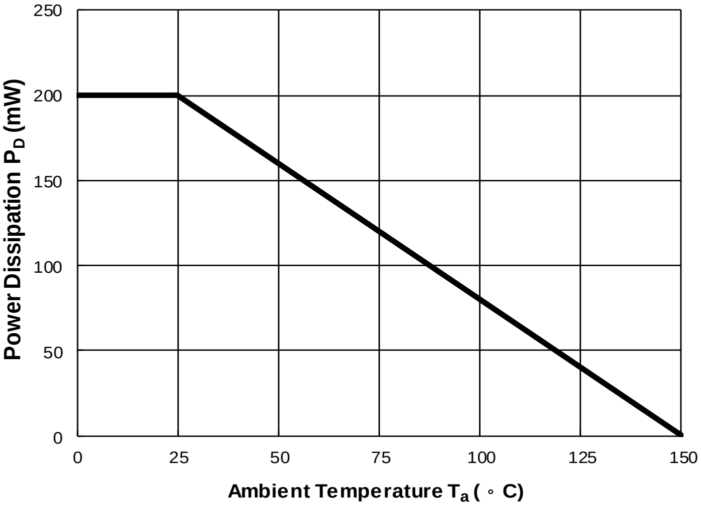
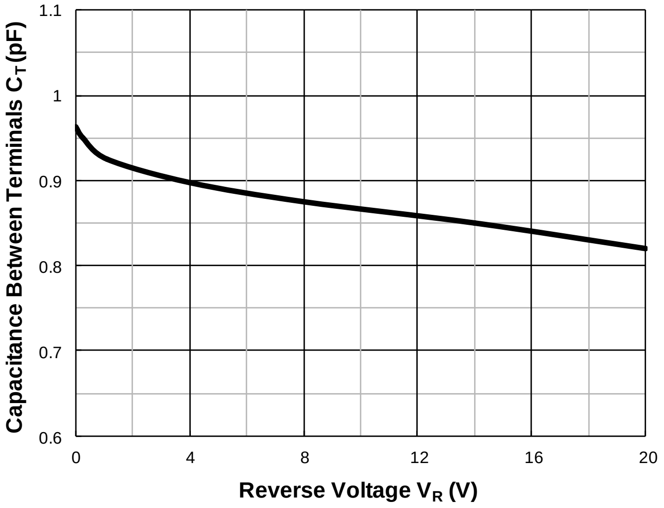
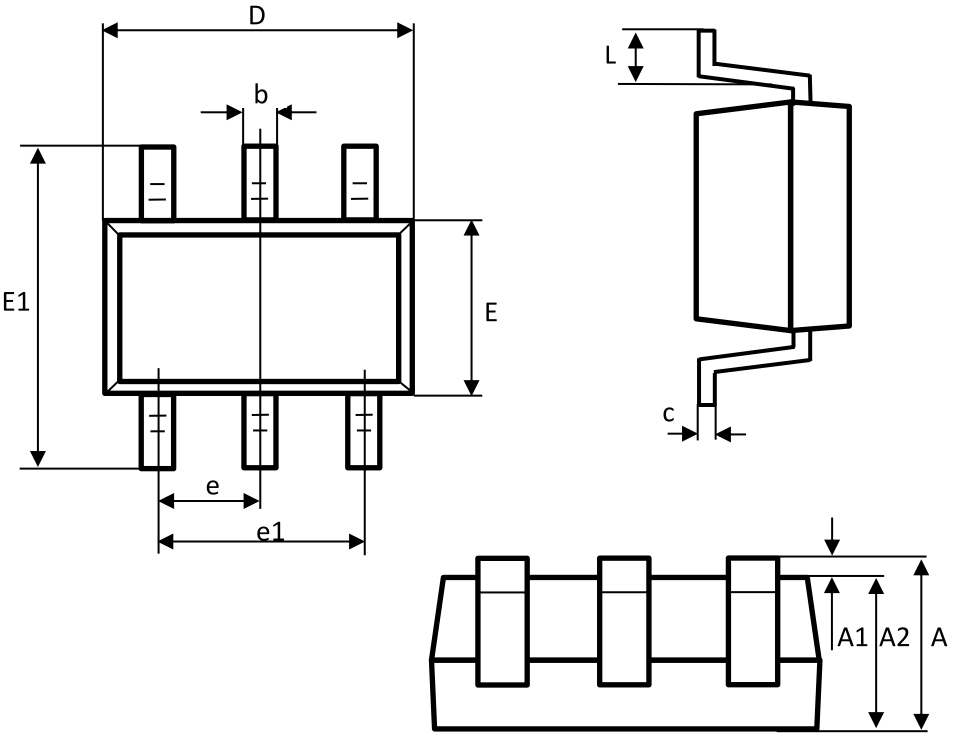


FIG.4 - Capacitance Characteristics



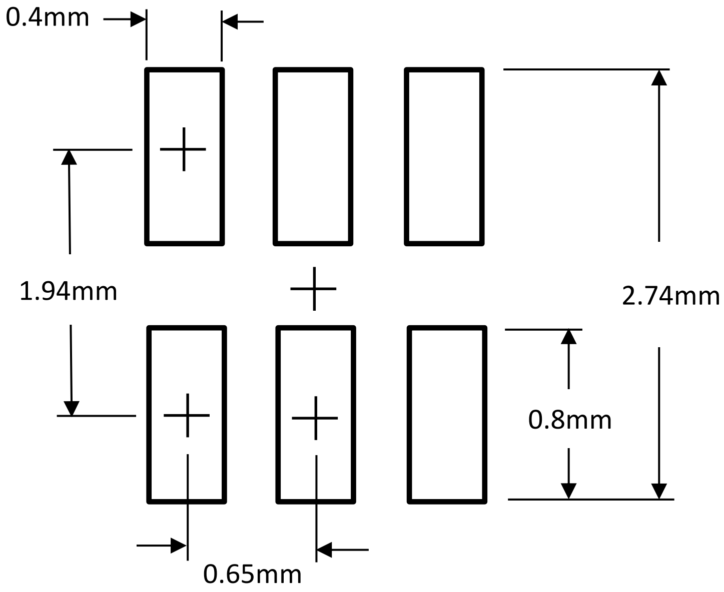
The curve above is for reference only.

Package Outline Dimensions



SOT363 Package		
Dim	Min	Max
A	0.90	1.10
A1	0.00	0.10
A2	0.90	1.00
b	0.15	0.35
c	0.08	0.15
D	2.00	2.20
E	1.15	1.35
E1	2.15	2.45
e	0.65 typ	
e1	1.20	1.40
L	0.26	0.46
All Dimensions in mm		

Suggested Soldering Pad Layout



Note:

1.The pad layout is for reference purposes only.

2.General tolerance ±0.05mm

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