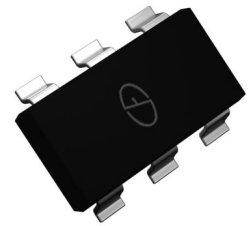


Switching Diode

Features

- Fast Switching Device (TRR <4nS)
- Power Dissipation of 200mW
- Low reverse leakage
- High Stability and High Reliability
- RoHS Compliant



Marking: .KA2

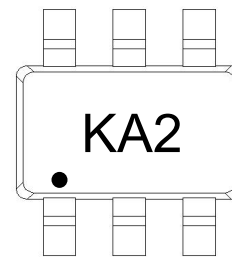
SOT-363

Applications

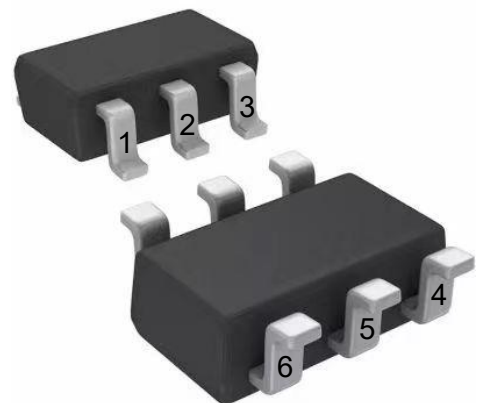
- High speed switching

Mechanical Data

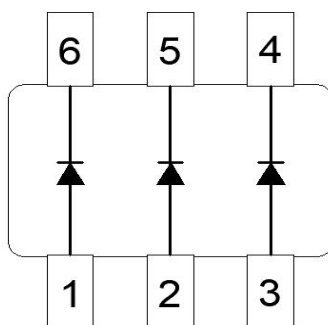
- Package: SOT-363
- Lead Finish: Matte Tin
- Case Material: "Green" Molding Compound
- UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 3 per J-STD-020
- Tape Reel :3000pcs



Pin definition



Epuivalent circuit

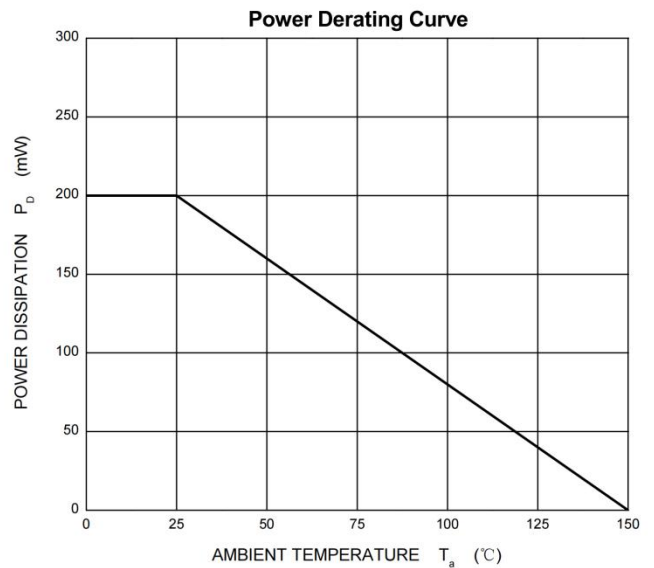
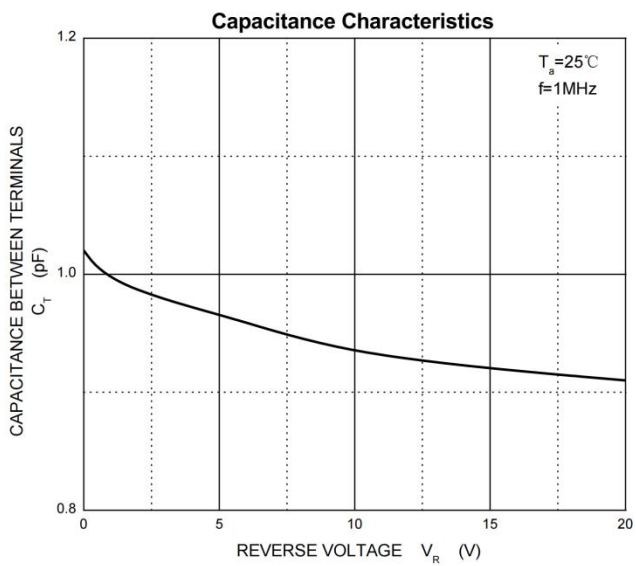
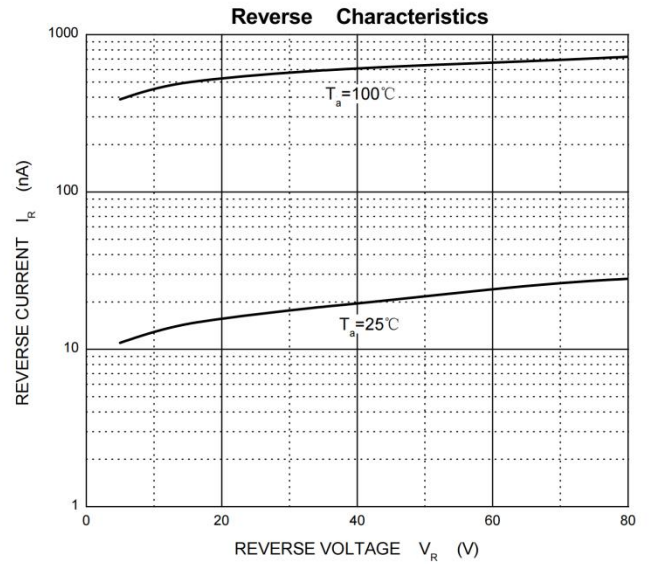
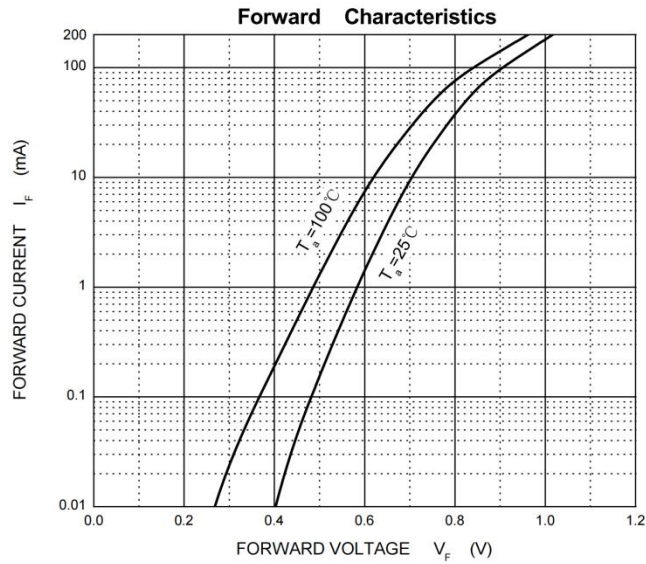


Maximum Ratings & Electrical Characteristics (T _A =25°C unless otherwise noted)			
Parameter	Symbol	Value	Unit
Peak reverse voltage	V _{RM}	100	V
Continuous Reverse voltage	V _R	75	V
Average rectified output current	I _O	150	mA
Non-repetitive Peak Forward Current	I _{FM}	300	mA
Non-repetitive Peak Forward Surge Current @t=8.3ms	I _{FSM}	2	A
Power Dissipation	P _D	200	mW
Thermal Resistance Junction to Ambient	R _{θJA}	625	°C/W
Junction temperature Range	T _J	-55 ~ +150	°C
Storage Temperature	T _{STG}	-55 ~ +150	°C

Electrical Specifications (T _A =25°C unless otherwise noted)					
Parameter	Symbol	Test Conditions	Limits		Unit
			Min	Max	
Reverse Breakdown Voltage	V _{BR}	I _R = 100μA	100		V
		I _R = 5μA	75		V
Reverse Leakage Current	I _R	V _R = 20V		25	nA
		V _R = 75V		1	uA
Forward Voltage	V _F	I _F = 1.0mA		0.715	V
		I _F = 10mA		0.855	V
		I _F = 50mA		1	V
		I _F = 150mA		1.25	V
Junction Capacitance	C _J	V _R = 0, f = 1.0MHz		2	pF
Reverse Recovery Time	T _{RR}	I _F = I _R = 10mA, I _{TR} = 0.1 × I _R , R _L = 100 Ω		4	ns

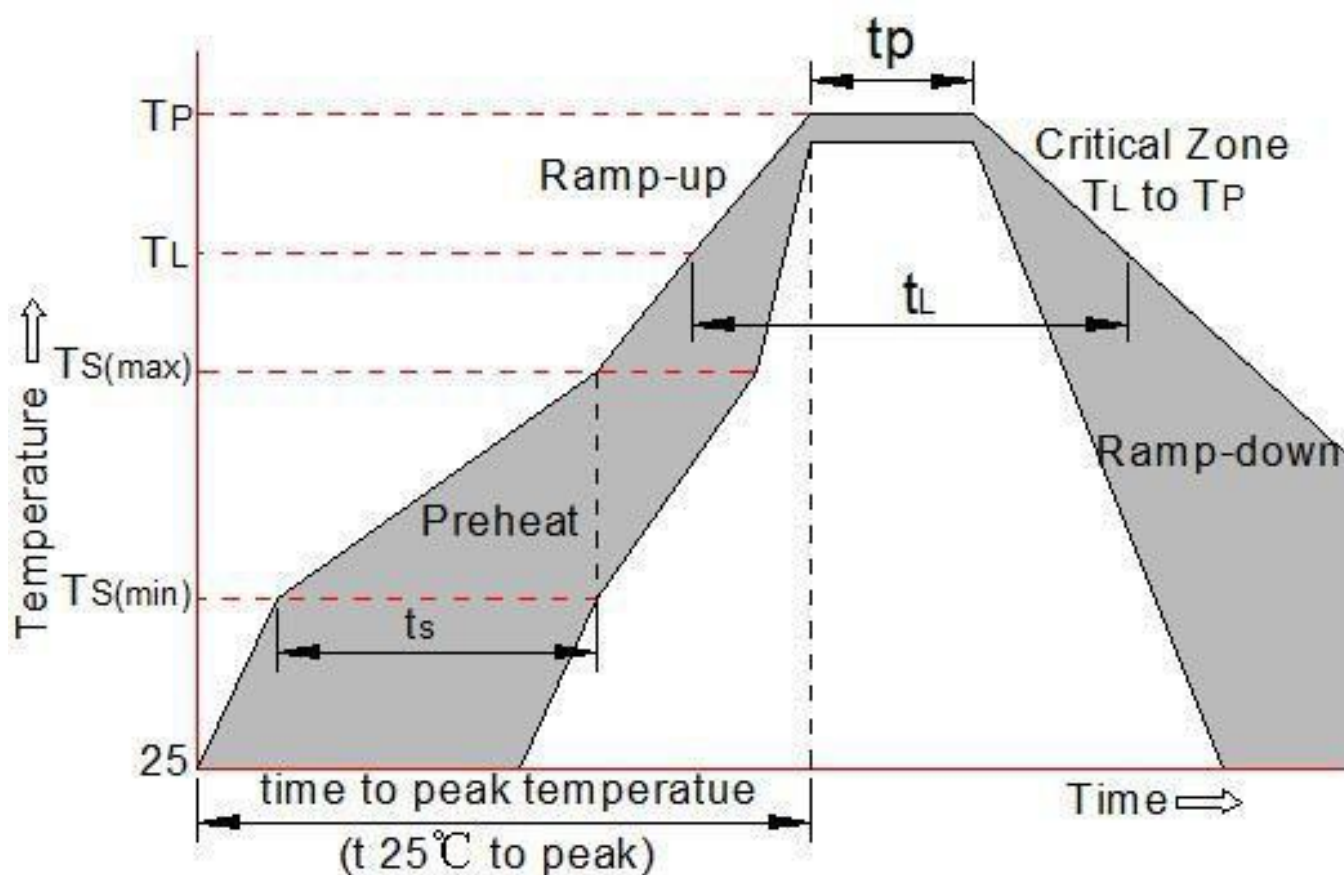
Ratings and Characteristics Curves

($T_A = 25^\circ\text{C}$ unless otherwise noted)



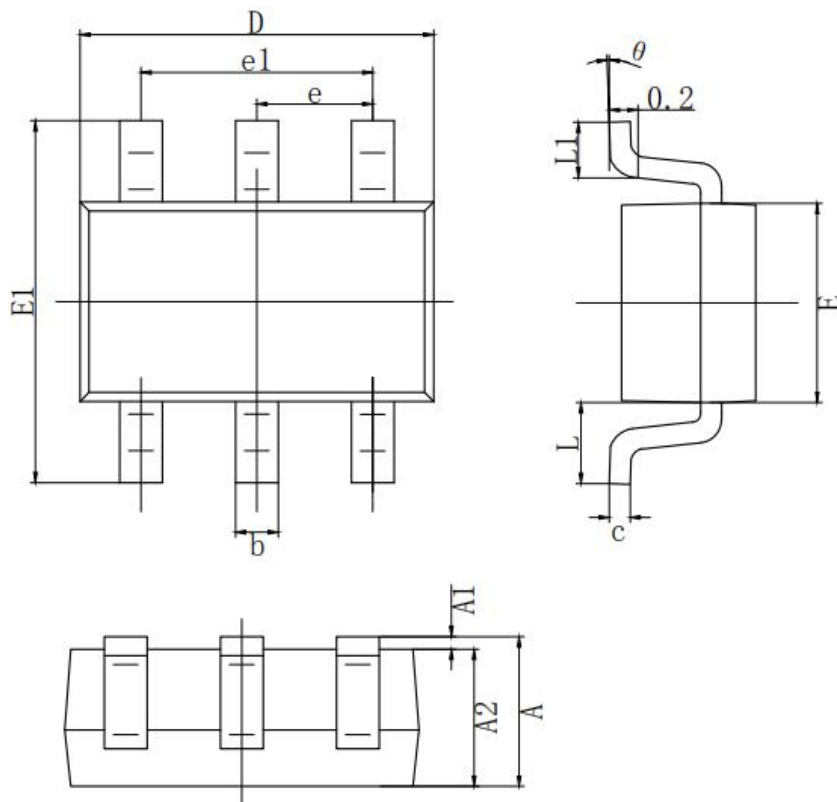
Soldering Parameters

Reflow Condition		Pb -Free assembly (see as bellow)
Pre Heat	-Temperature Min ($T_{s(min)}$)	+150 °C
	-Temperature Max($T_{s(max)}$)	+200 °C
	-Time (Min to Max) (t_s)	60 -180 secs.
Average ramp up rate (Liquid us Temp (T_L) to peak)		3 °C /sec. Max
$T_{s(max)}$ to T_L - Ramp -up Rate		3 °C /sec. Max
Reflow	-Temperature(T_L) (Liquid us)	+217 °C
	-Temperature(t_L)	60 -150 secs.
Peak Temp (T_p)		+260(+0/ -5) °C
Time within 5 °C of actual Peak Temp (t_p)		30 secs. Max
Ramp -down Rate		6 °C /sec. Max
Time 25 °C to Peak Temp (T_P)		8 min. Max
Do not exceed		+260 °C



Package Outline Dimensions

millimeters



SYMBOL	MILLIMETER	
	MIN	MAX
A	0.900	1.100
A1	0.000	0.100
A2	0.900	1.000
b	0.150	0.350
c	0.080	0.150
D	2.000	2.200
E	1.150	1.350
E1	2.150	2.450
e	0.650 TYP.	
e1	1.200	1.400
L	0.525 REF.	
L1	0.260	0.460
θ	0°	8°

Revision History

Document Version	Date of release	Description of changes
Rev.A	2017.06.13	First issue

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