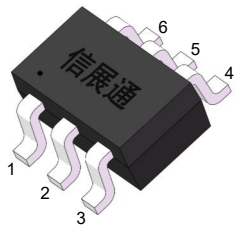
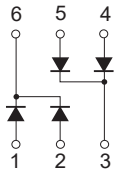
BAV70DW

SWITCHING DIODE

SOT-363

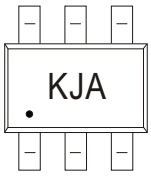




FEATURES

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

MAKING: KJA



Maximum Ratings @Ta=25℃

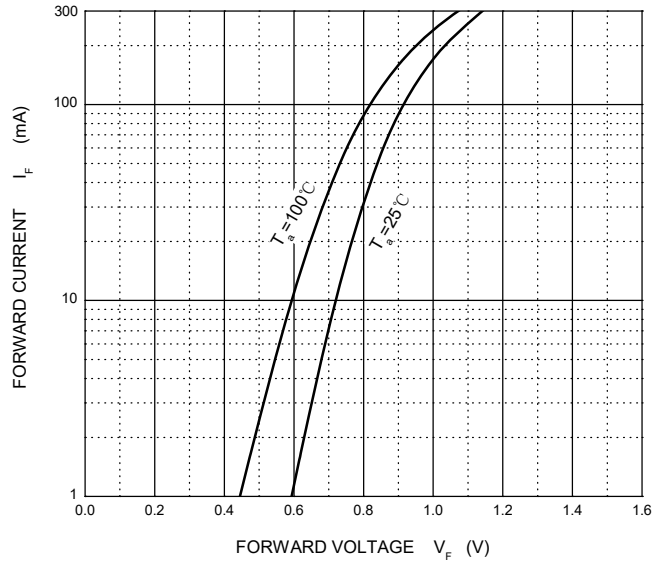
Parameter	Symbol	Limit	Unit
Peak Repetitive Peak Reverse Voltage **Working Peak Reverse Voltage** **DC Blocking Voltage**	V_{RRM} V_{RWM} V_R	100 100 75	V
Forward Continuous Current	I_{FM}	300	mA
Average Rectified Output Current	I_O	150	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I_{FSM}	2	A
Power Dissipation	P_D	200	mW
Thermal Resistance From Junction to Ambient	$R_{\theta JA}$	625	℃/W
Operation Junction and Storage Temperature Range	T_J,T_{STG}	-55~+150	℃

ELECTRICAL CHARACTERISTICS(T_a=25℃ unless otherwise specified)

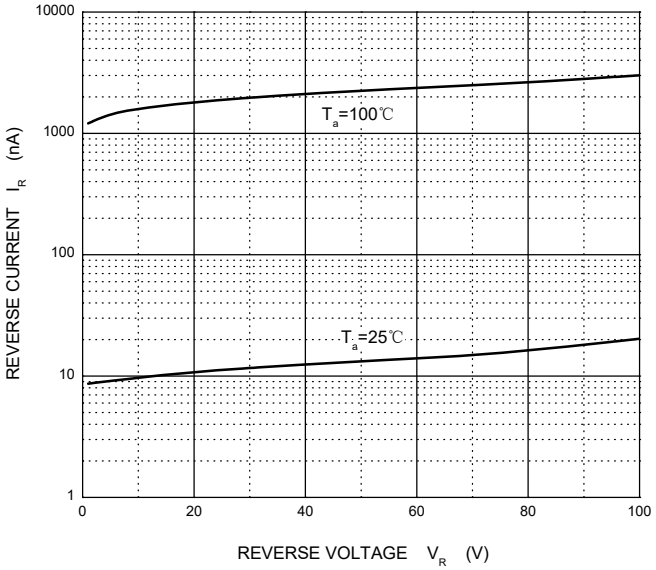
Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
Reverse voltage	$V_{(BR)}$	I_R=2.5μA	75			V
Reverse current	I_R	V_R=75V			2.5	μA
		V_R=20V			25	nA
Forward voltage	V_F	I_F=1mA			0.715	V
		I_F=10mA			0.855	
		I_F=50mA			1	
		I_F=150mA			1.25	
Total capacitance	C_{tot}	V_R=0,f=1MHz			2	pF
Reverse recovery time	t_{rr}	I_F= I_R=10mA, I_{rr}=0.1×I_R, R_L=100Ω			4	ns

Typical Characteristics

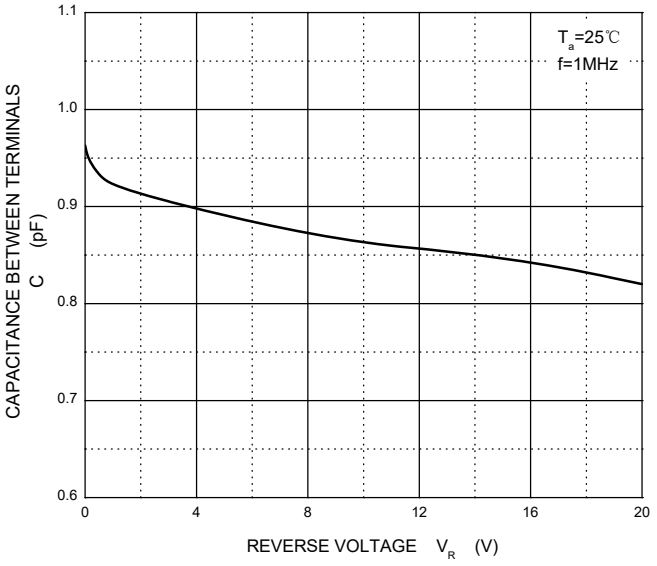
Forward Characteristics



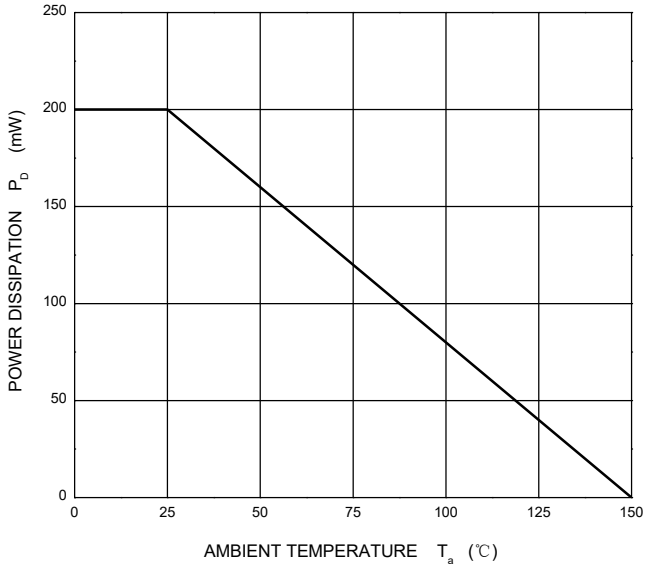
Reverse Characteristics



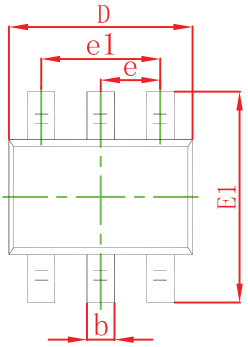
Capacitance Characteristics

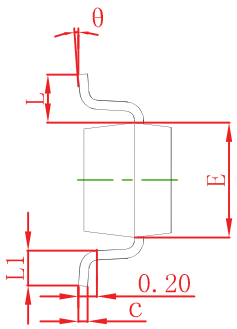


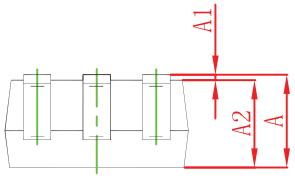
Power Derating Curve



SOT-363 Package Outline Dimensions

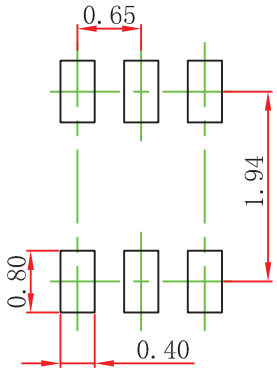






Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.150	0.350	0.006	0.014
c	0.100	0.150	0.004	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.400	0.085	0.094
e	0.650 TYP		0.026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