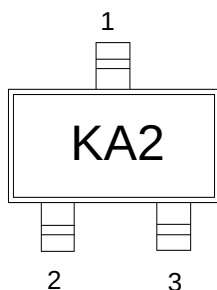
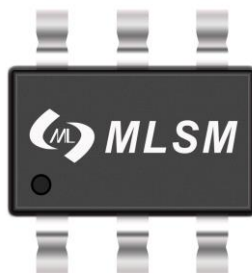


Features

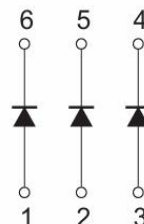
- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance



Marking and pin assignment



SOT-363 top view



Schematic diagram



Halogen-Free

Maximum Ratings($T_a=25^\circ\text{C}$ unless otherwise noted)

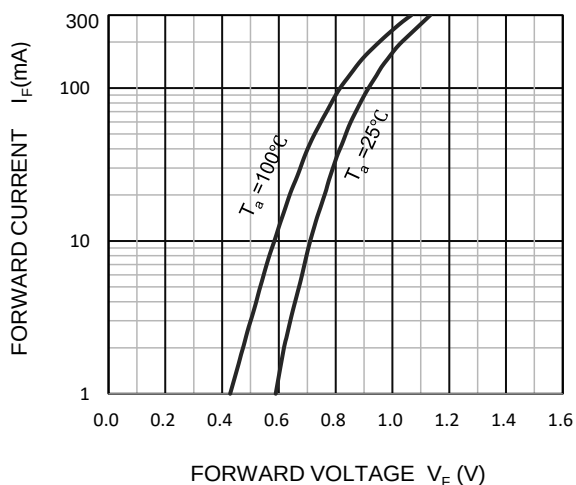
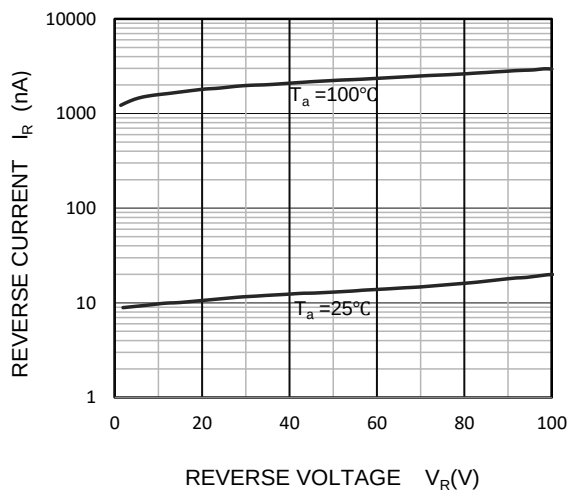
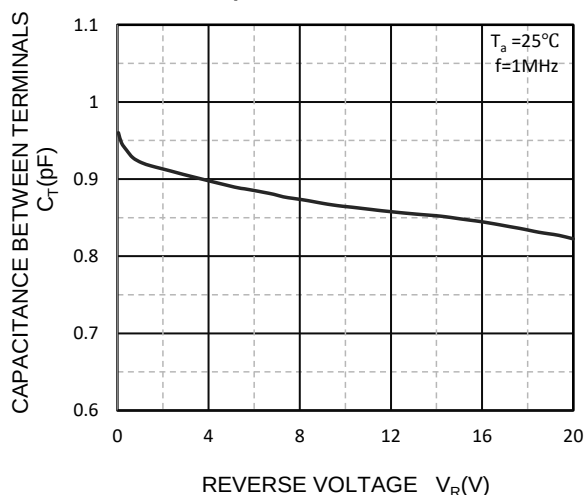
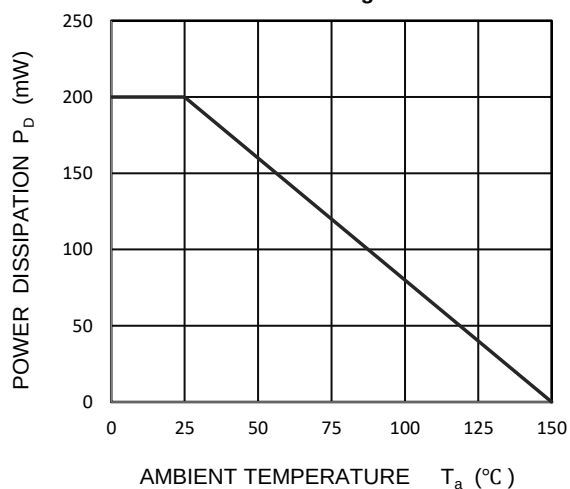
Symbol	Parameter	Value	Unit
V_{RM}	Non-Repetitive Peak Reverse Voltage	100	V
V_R	Peak Repetitive Peak Reverse Voltage	75	V
V_{RRM}	Working Peak Reverse Voltage		
V_{RWM}	DC Blocking Voltage		
I_{FM}	Forward Continuous Current	300	mA
$V_{R(RMS)}$	RMS Reverse Voltage	53	V
I_O	Average Rectified Output Current	150	mA
I_{FSM}	Non-Repetitive Peak Forward Surge Current @ $t=8.3\text{ms}$	2	A
P_D	Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance Junction to Ambient	625	$^\circ\text{C/W}$
T_J, T_{STG}	Operating and Storage Temperature Range	-55~ +150	$^\circ\text{C}$

ELECTRICAL CHARACTERISTICS($T_a=25^\circ\text{C}$ unless otherwise specified)

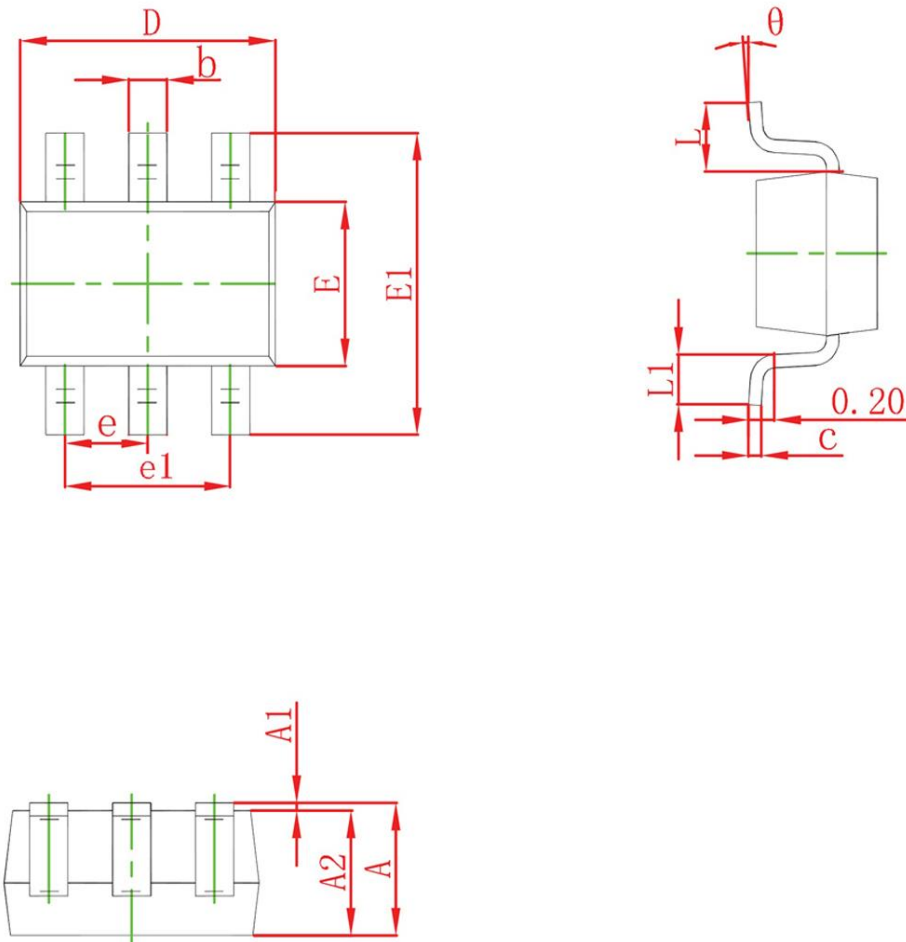
Symbol	Parameter	Condition	Min	Typ	Max	Unit
$V_{(BR)}$	Reverse voltage	$I_R=10\mu\text{A}$	75	--	--	V
I_{R1}	Reverse current	$V_R=75\text{V}$	--	--	1	μA
I_{R2}		$V_R=20\text{V}$	--	--	25	nA
V_{F1}	Forward voltage	$I_F=1\text{mA}$	--	--	0.715	V
V_{F2}		$I_F=10\text{mA}$	--	--	0.855	V
V_{F3}		$I_F=50\text{mA}$	--	--	1.000	V
V_{F4}		$I_F=150\text{mA}$	--	--	1.250	V
C_T	Capacitance between terminals	$V_R=0, f=1\text{MHz}$	--	--	2	pF
t_{rr}	Reverse recovery time	$I_F=I_R=10\text{mA}, I_{rr}=0.1I_R, R_L=100\Omega$	--	--	4	ns

Ordering Information (Example)

Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
BAS16TW- MMBD4148TW	SOT-363	KA2	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°