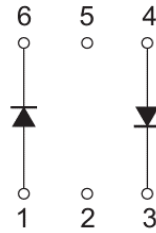


Features

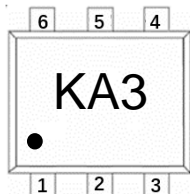
- Fast switching speed
- Ultra-Small Surface Mount Package
- For general purpose switching applications
- High Conductance Power Dissipation



SOT-363 top view



Schematic diagram



Marking and pin assignment


Halogen-Free
Maximum Ratings(T_a=25°C unless otherwise noted)

Symbol	Parameter	Value	Unit
V _{RM}	Non-Repetitive Peak Reverse Voltage	100	V
V _R	DC Blocking Voltage	75	V
V _{RRM}	Working Peak Reverse Voltage		
V _{RWM}	DC Blocking Voltage		
I _{FM}	Forward Continuous Current	500	mA
V _{R (RMS)}	RMS Reverse Voltage	53	V
I _o	Average Rectified Output Current	250	mA
I _{FSM}	Non-Repetitive Peak Forward Surge Current @t=8.3ms	2	A
P _D	Power Dissipation	200	mW
R _{θJA}	Thermal Resistance Junction to Ambient	625	°C/W
T _J , T _{STG}	Operating and Storage Temperature Range	-55~ +150	°C

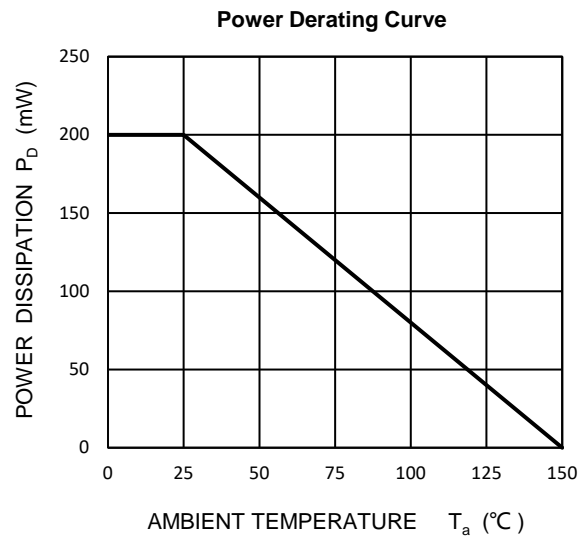
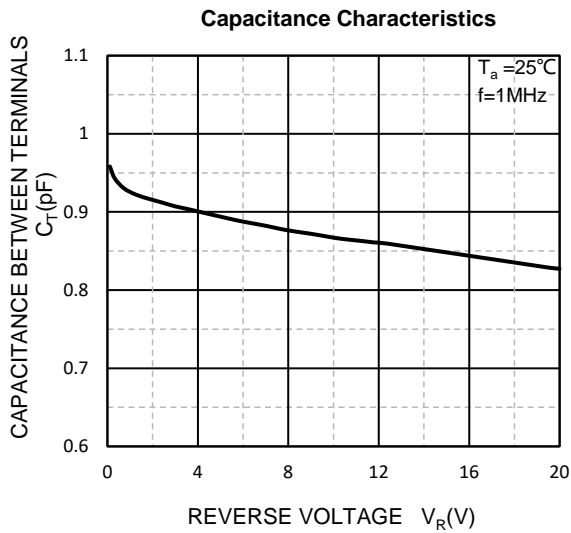
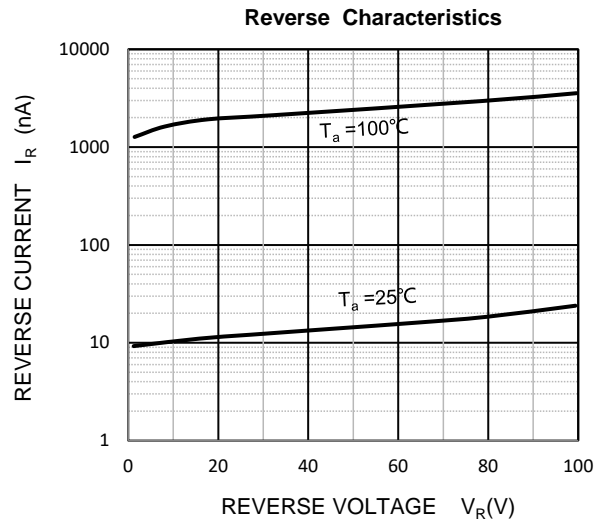
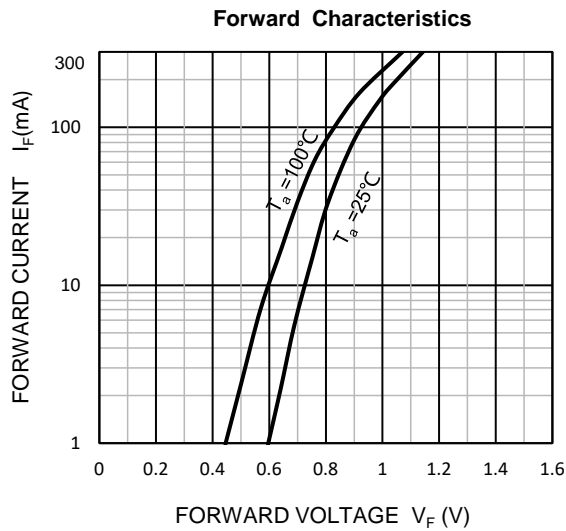
ELECTRICAL CHARACTERISTICS(T_a=25°C unless otherwise specified)

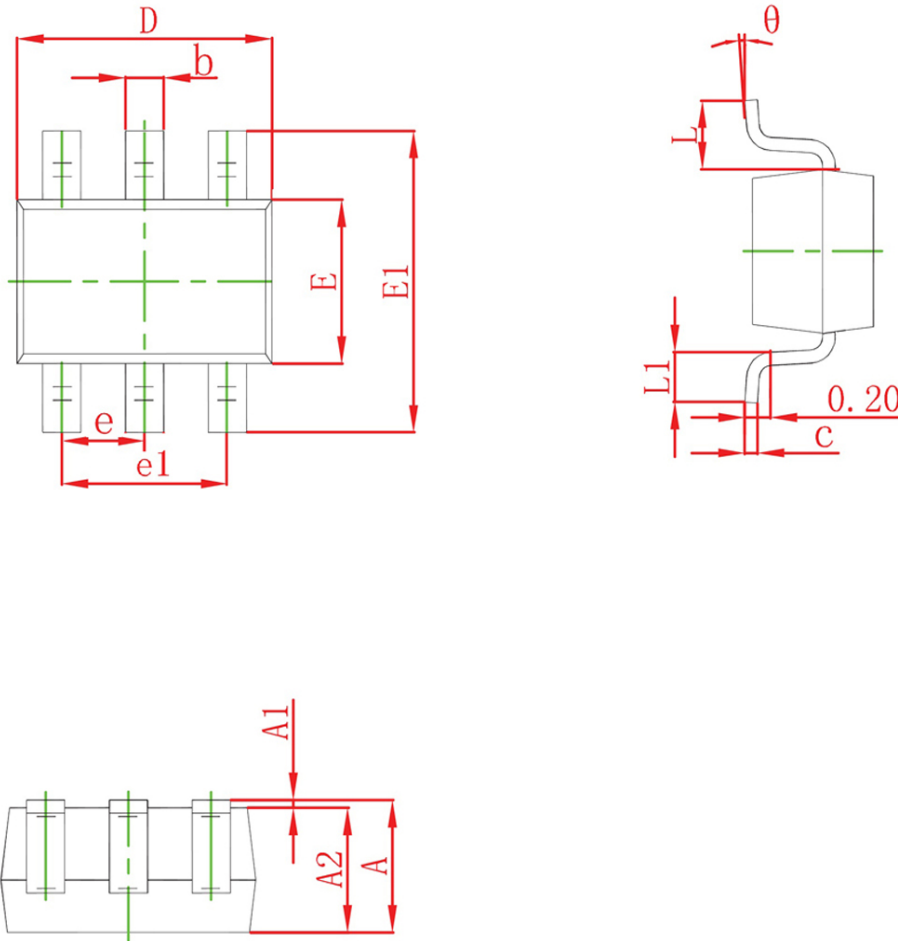
Symbol	Parameter	Condition	Min	Typ	Max	Unit
V _(BR)	Reverse voltage	I _R =10μA	75	--	--	V
I _{R1}	Reverse current	V _R =75V	--	--	2.5	μA
I _{R2}		V _R =20V	--	--	25	nA
V _{F1}	Forward voltage	I _F =5mA	0.62	--	0.720	V
V _{F2}		I _F =10mA	--	--	0.855	V
V _{F3}		I _F =100mA	--	--	1.000	V
V _{F4}		I _F =150mA	--	--	1.250	V
C _T	Capacitance between terminals	V _R =0, f=1MHz	--	--	4	pF
t _{rr}	Reverse recovery time	I _F = I _R =10mA, I _{rr} =0.1X I _R , R _L =100Ω	--	--	4	ns

Ordering Information (Example)

Type	Package	Marking	Minimum Package(pcs)	Inner Box Quantity(pcs)	Outer Carton Quantity(pcs)	Delivery Mode
MMBD4448DW	SOT-363	KA3	3,000	45,000	180,000	7" reel

Typical Operating Characteristics



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°