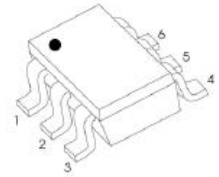




MMBD4448HAQW_HADW_HCDW_HSDW_HTW Switching Diode

FEATURES

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



SOT-363

MMBD4448HAEW	MMBD4448HADW	MMBD4448HCDW	MMBD4448HSDW	MMBD4448HTW
MARKING:KA5	MARKING:KA6	MARKING:KA7	MARKING:KAB	MARKING:KAA

Maximum Ratings and Electrical Characteristics, Single Diode @T_a=25 °C

Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	V _{RM}	100	V
Peak Repetitive Peak Reverse Voltage	V _{RRM}	80	V
Working Peak Reverse Voltage	V _{RWM}		
DC Blocking Voltage	V _R		
RMS Reverse Voltage	V _{R(RMS)}	57	V
Forward Continuous Current	I _{FM}	500	mA
Average Rectified Output Current	I _O	250	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I _{FSM}	2.0	A
Power Dissipation	P _d	200	mW
Thermal Resistance from Junction to Ambient	R _{θJA}	625	°C/W
Storage Temperature	T _{STG}	-55 ~+150	°C



ELECTRICAL CHARACTERISTICS

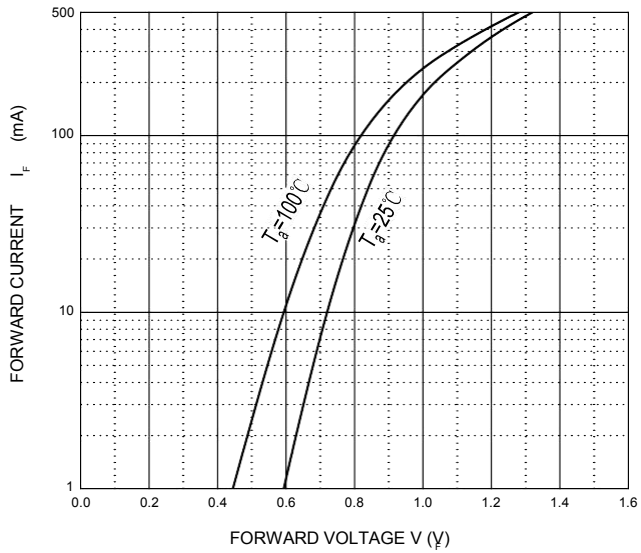
Electrical Ratings @Ta=25°C

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse Breakdown Voltage	$V_{(BR)}$	80			V	$I_R=100\mu A$
Forward Voltage	V_{F1}	0.62		0.72	V	$I_F=5mA$
	V_{F2}			0.855	V	$I_F=10mA$
	V_{F3}			1.0	V	$I_F=100mA$
	V_{F4}			1.25	V	$I_F=150mA$
Reverse Current	I_{R1}			100	nA	$V_R=70V$
	I_{R2}			25	nA	$V_R=20V$
Capacitance Between Terminals	C_T			3.5	pF	$V_R=0V, f=1MHz$
Reverse Recovery Time	t_{rr}			4	ns	$I_F=I_R=10mA$ $I_{rr}=0.1I_R, R_L=100\Omega$

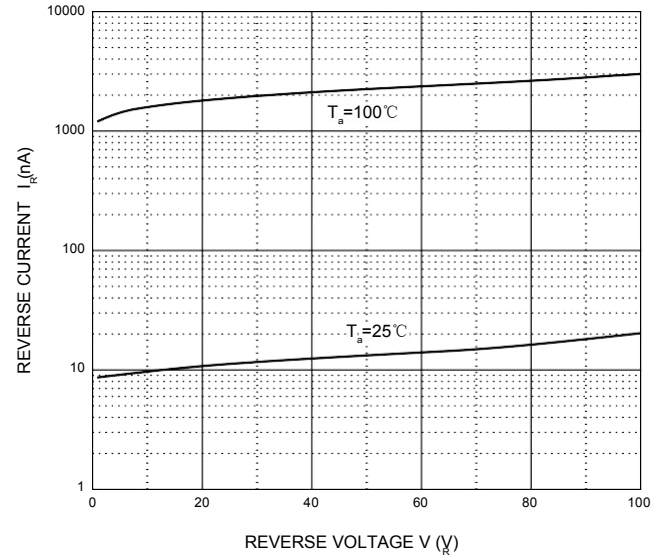


Typical Characteristics

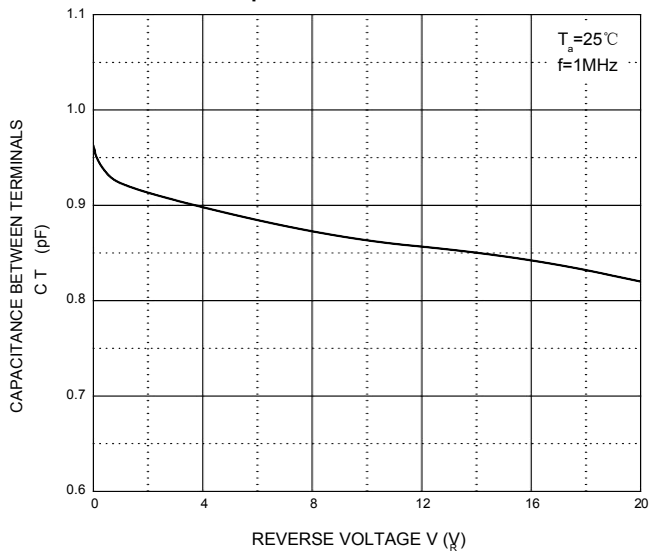
Forward Characteristics



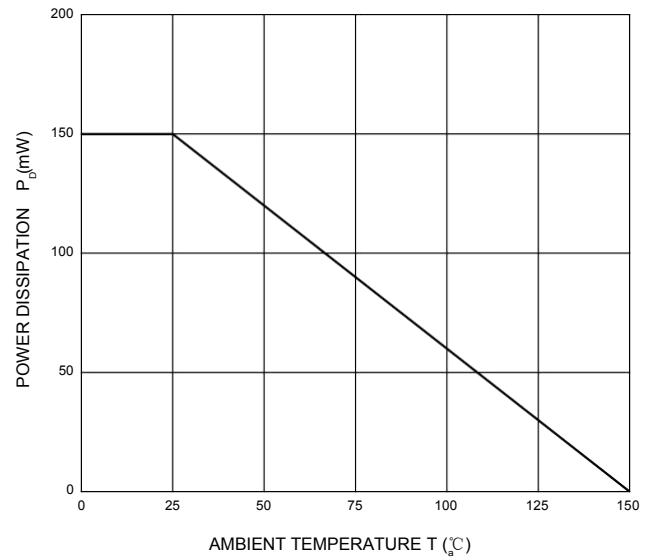
Reverse Characteristics



Capacitance Characteristics

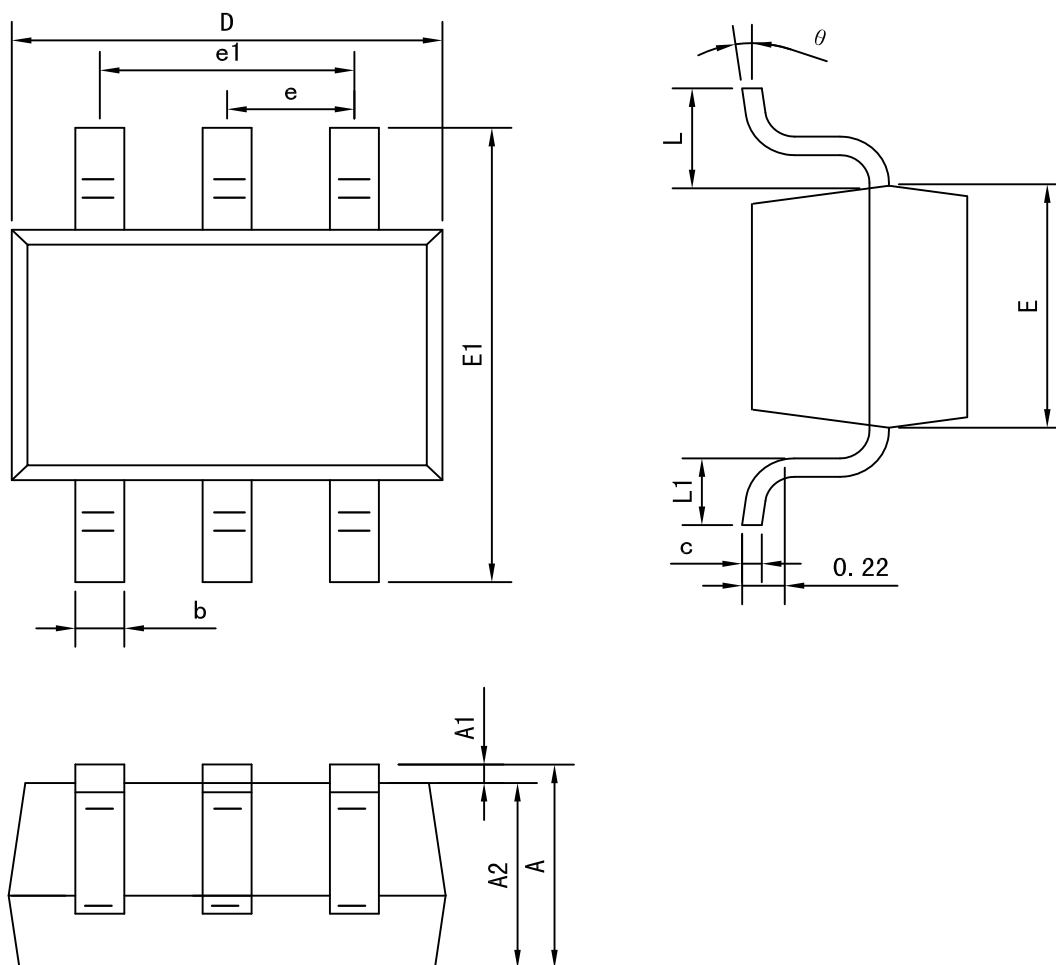


Power Derating Curve





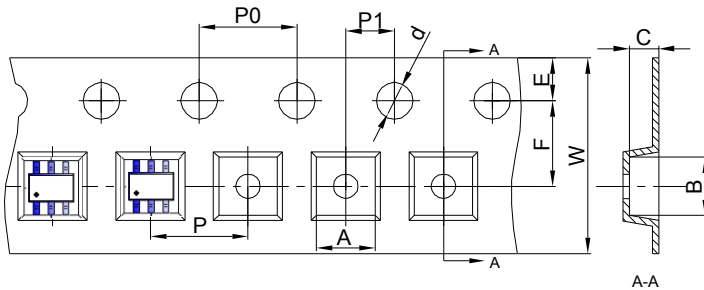
SOT-363 Package outline dimensions



Symbol	Dimension in Millimeters	
	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°



SOT-363 Embossed Carrier Tape



Packaging Description:

SOT-363 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in standard option are shipped with 3,000 units per 7" or 17.8cm diameter reel. The reels are clear in color and is made of polystyrene plastic (anti-static coated).

Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-363	2.25	2.55	1.20	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

SOT-363 Tape Leader and Trailer

