

Plastic-Encapsulate Diodes

Switching Diode

FEATURES

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



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

Solid dot = Pin1 indicate.

Solid dot = Green molding compound device, if none, the normal device.

Maximum Ratings and Electrical Characteristics, Single Diode @Ta=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	$R_{\theta JA}$	625	°C/W
Storage Temperature	T_{STG}	-55 ~ +150	°C

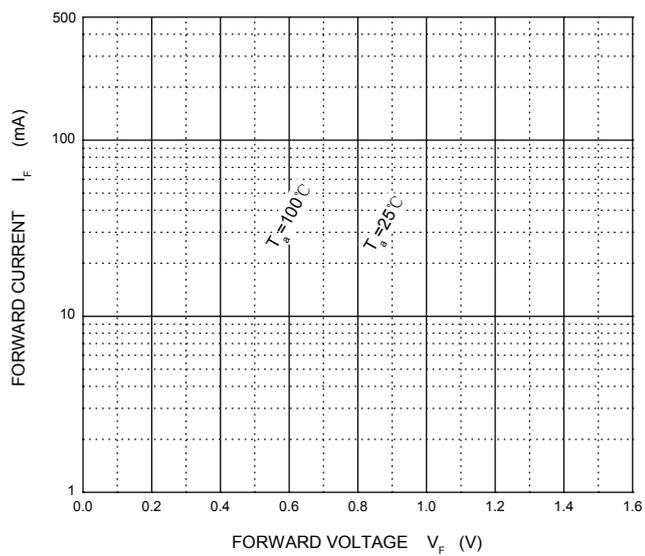
ELECTRICAL CHARACTERISTICS

Electrical Ratings @Ta=25°C

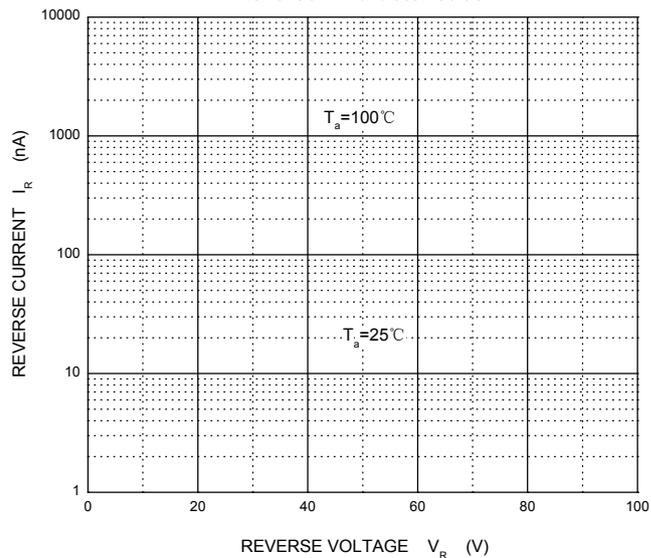
Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse Breakdown Voltage	$V_{(BR)}$	80			V	$I_R=100\mu A$
Forward Voltage	V_{F1}	0.62		0.72	V	$I_F=5mA$
	V_{F2}			0.855	V	$I_F=10mA$
	V_{F3}			1.0	V	$I_F=100mA$
	V_{F4}			1.25	V	$I_F=150mA$
Reverse Current	I_{R1}			100	nA	$V_R=70V$
	I_{R2}			25	nA	$V_R=20V$
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

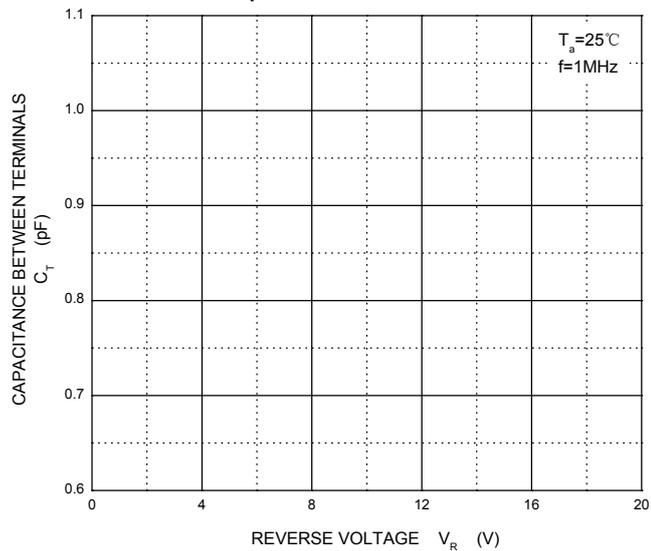
Forward Characteristics



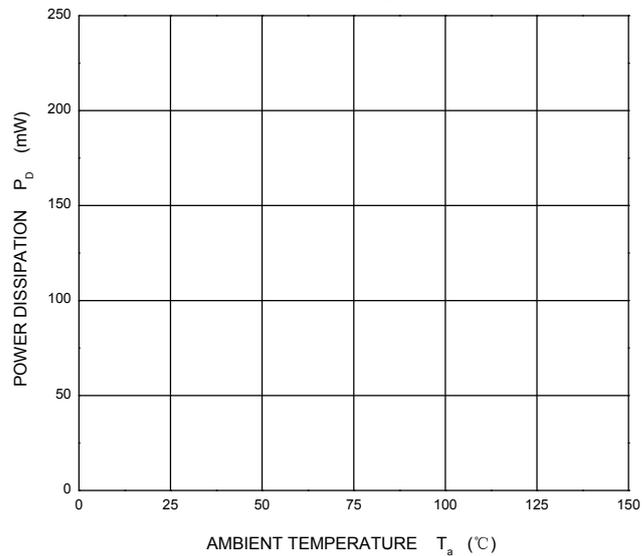
Reverse Characteristics



Capacitance Characteristics



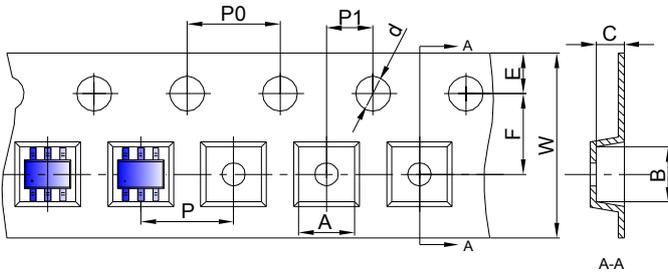
Power Derating Curve



SOT-363 Tape and Reel

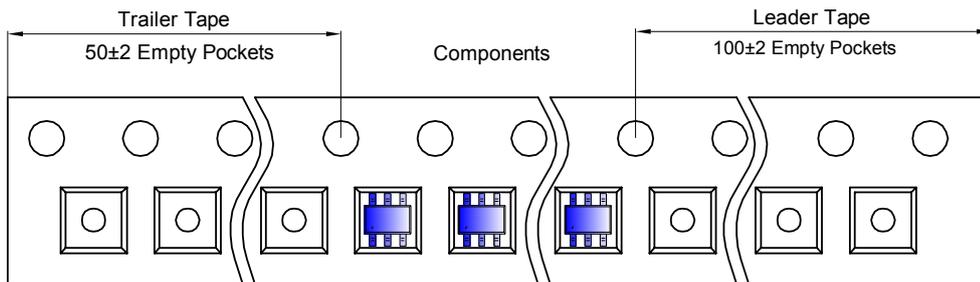
SOT-363 Tape and reel

SOT-363 Embossed Carrier Tape

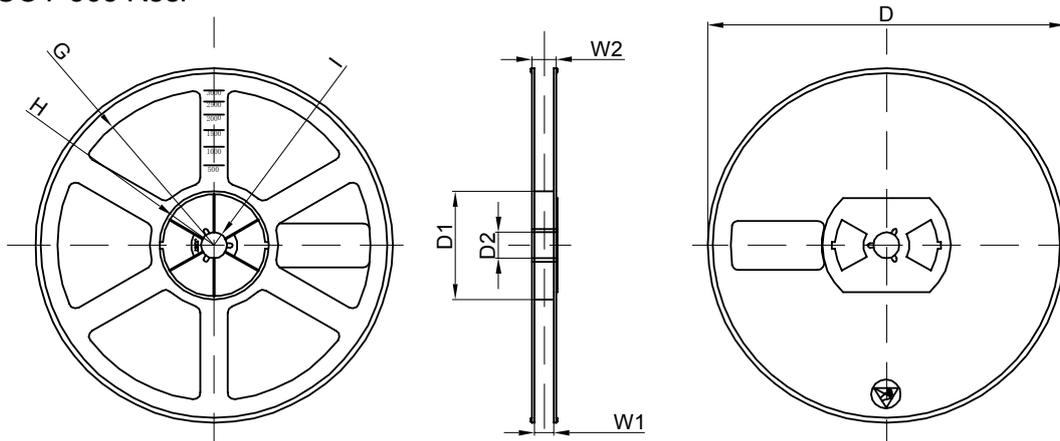


Dimensions are in millimeter										
Pkg type	A	B	C	d	E	F	P0	P	P1	W
SOT-363	2.25	2.55	1.20	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00

SOT-363 Tape Leader and Trailer

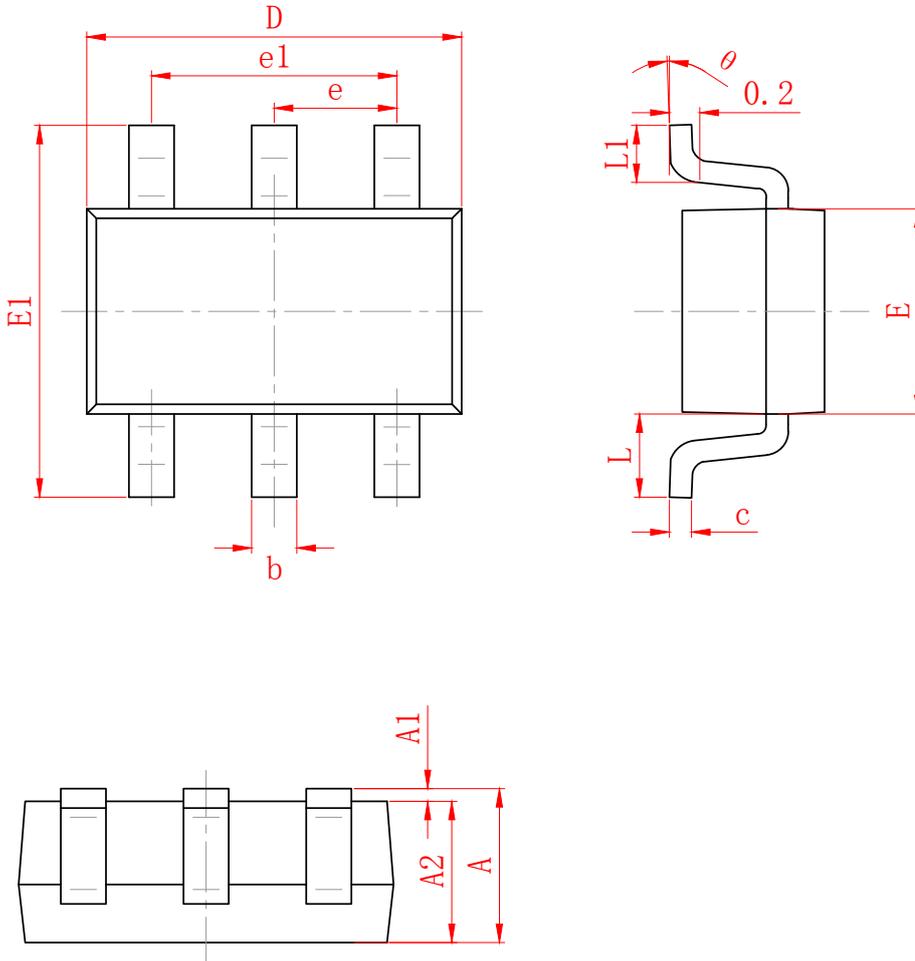


SOT-363 Reel



Dimensions are in millimeter								
Reel Option	D	D1	D2	G	H	I	W1	W2
7" Dia	Ø178.00	54.40	13.00	R78.00	R25.60	R6.50	9.50	12.30

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
3000 pcs	7 inch	30,000 pcs	203×203×195	120,000 pcs	438×438×220	



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°

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