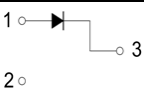
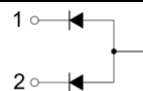
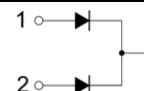
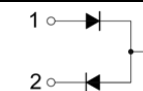
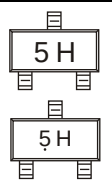
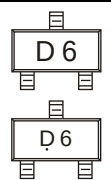
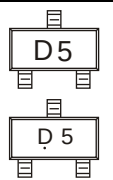
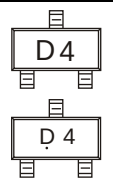


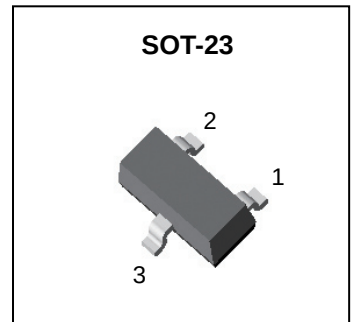
FEATURES

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

MARKING:

MMBD4148A	MMBD4148CA	MMBD4148CC	MMBD4148SE
			
MARKING:5H	MARKING:D6	MARKING:D5	MARKING:D4
			

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

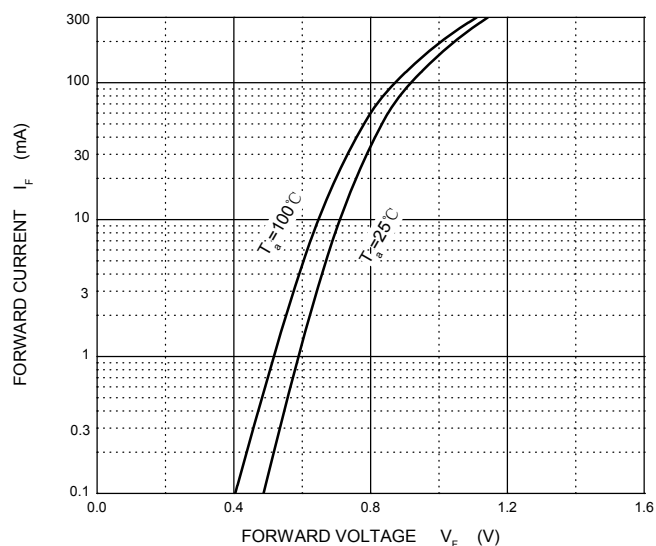
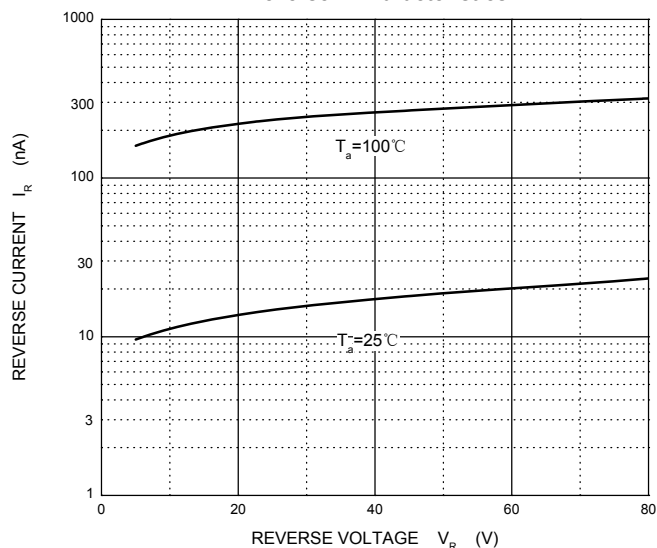
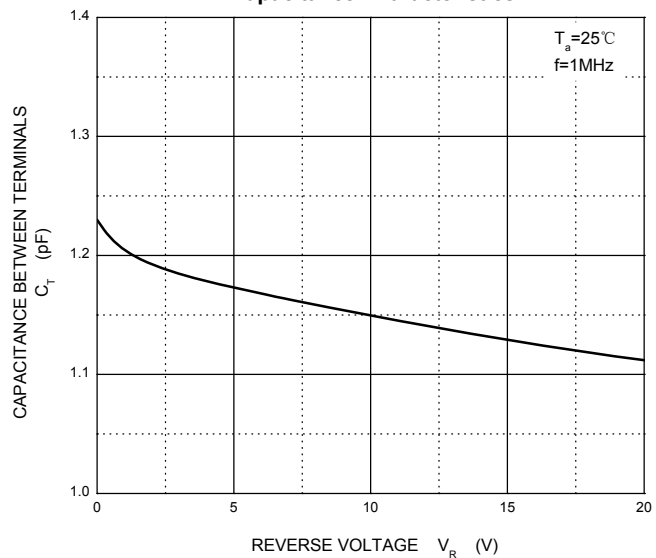
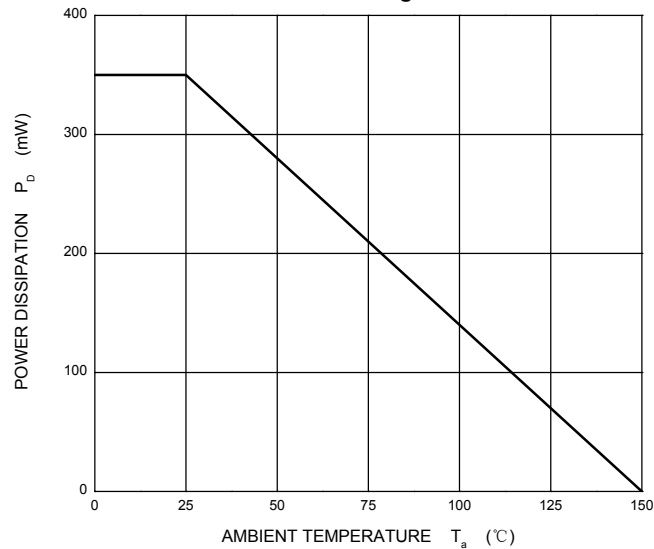

Maximum Ratings @Ta=25°C

Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Peak Reverse Voltage	V_{RRM}	100	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	72	V
Forward Continuous Current	I_{FM}	300	mA
Average Rectified Output Current	I_O	200	mA
Non-Repetitive Peak Forward Surge Current @ t=8.3ms	I_{FSM}	2.0	A
Power Dissipation	P_D	350	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	357	°C/W
Junction Temperature	T_j	150	°C
Storage Temperature	T_{STG}	-55~+150	°C

Electrical Ratings @Ta=25°C

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Reverse breakdown voltage	$V_{(BR)1}$	100			V	$I_R=100\mu A$
	$V_{(BR)2}$	75			V	$I_R=5\mu A$
Forward voltage	V_F			1	V	$I_F=10mA$
Reverse current	I_{R1}			5	μA	$V_R=75V$
	I_{R2}			25	nA	$V_R=25V$
Capacitance between terminals	C_T			4	pF	$V_R=0V, f=1MHz$
Reverse recovery time	t_{rr}			4	ns	$I_F=I_R=10mA, V_R=6V, I_{rr}=0.1I_R, R_L=100\Omega$

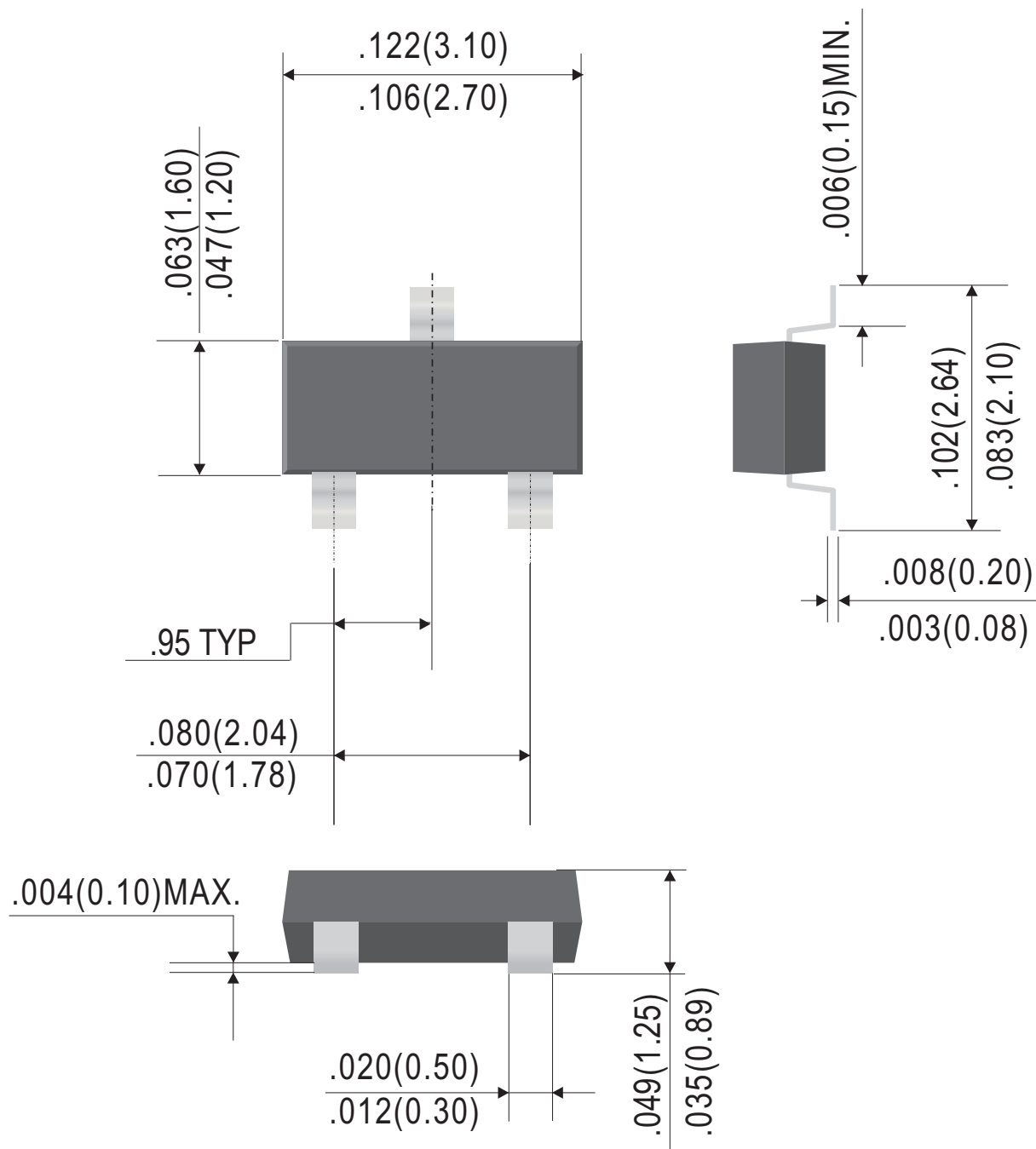
Typical Characteristics

Forward Characteristics

Reverse Characteristics

Capacitance Characteristics

Power Derating Curve




Outline Drawing

SOT-23



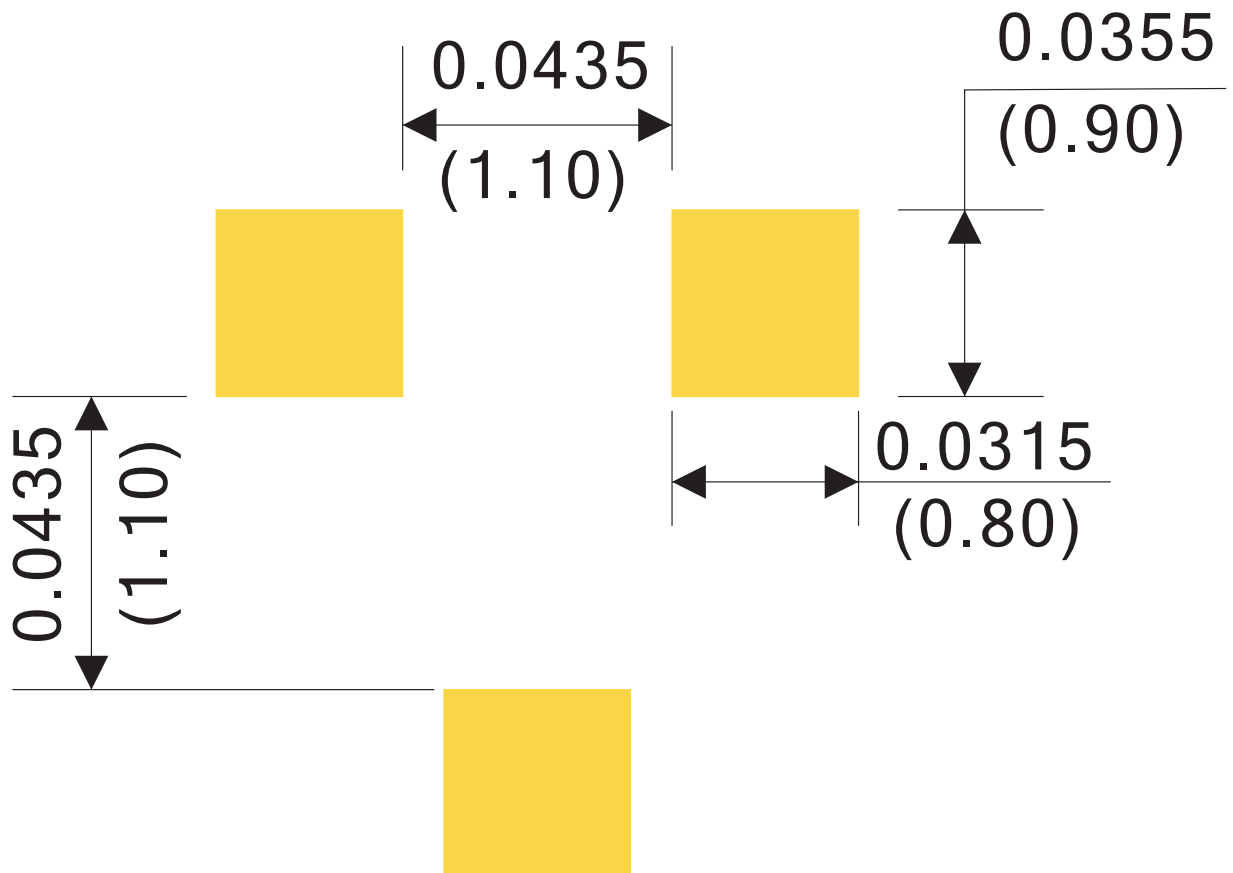
Dimensions in inches and (millimeters)

Rev.E



Suggested Soldering Pad Layout

SOT-23



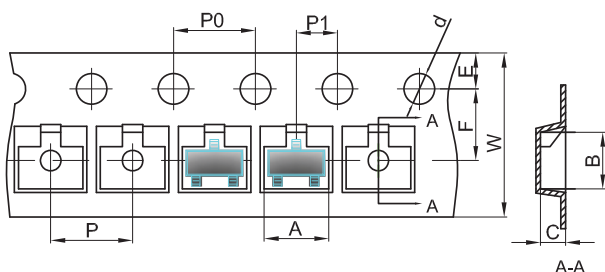
Dimensions in inches and (millimeters)

RevA



SOT-23 Tape and Reel

SOT-23 Embossed Carrier Tape

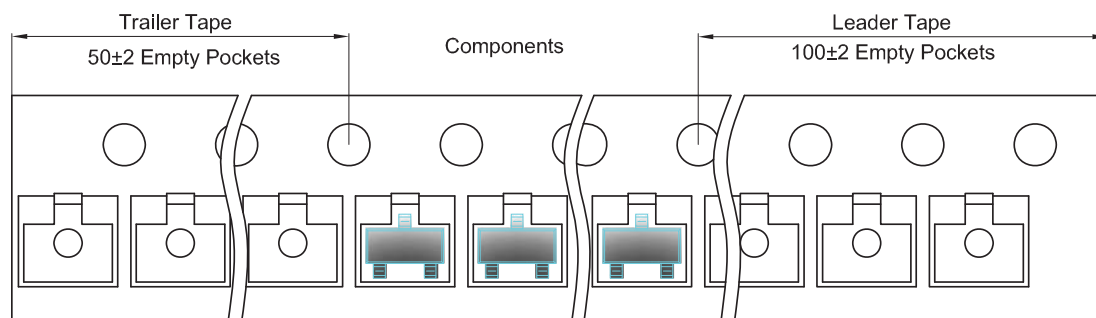


Packaging Description:

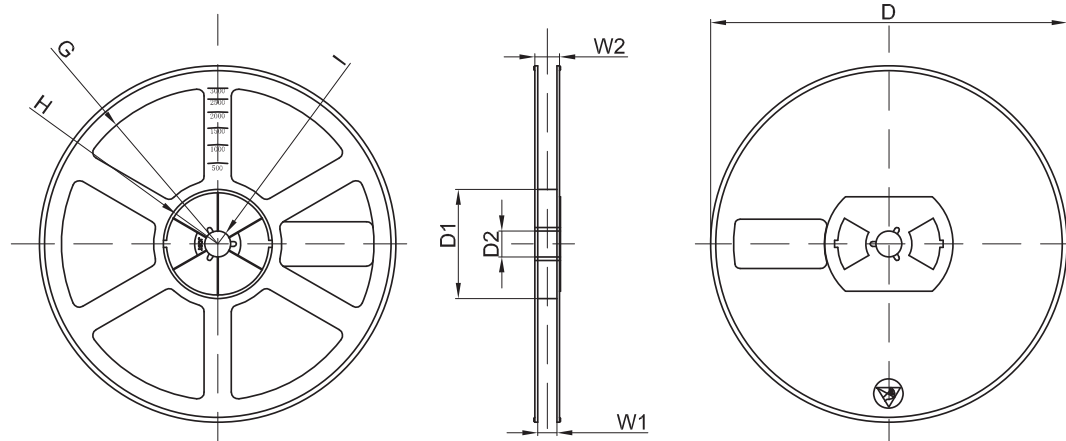
SOT-23 parts are shipped in tape. The carrier tape is made from a dissipative (carbon filled) polycarbonate resin. The cover tape is a multilayer film (Heat Activated Adhesive in nature) primarily composed of polyester film, adhesive layer, sealant, and anti-static sprayed agent. These reeled parts in 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-23	3.15	2.77	1.22	Ø1.50	1.75	3.50	4.00	4.00	2.00	8.00
(Tolerance)	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+/-0.1	+0.3/-0.1

SOT-23 Tape Leader and Trailer



SOT-23 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
Tolerance	+/-2	+/-1	+/-1	+/-1	+/-1	+/-1	+/-1	+/-1

REEL	Reel Size	Box	Box Size(mm)	Carton	Carton Size(mm)	G.W.(kg)
3000 pcs	7 inch	45,000 pcs	203×203×195	180,000 pcs	438×438×220	

Ordering Information:

Device PN	Packing
Part Number -T ⁽¹⁾ G ⁽²⁾ -WS ⁽³⁾	Tape&Reel: 3 Kpcs/Reel

Note: (1) Packing code, Tape & Reel Packing

(2) RoHS product for packing code suffix "G" ; Halogen free product for packing code suffix "H"

(3) WS : Willas brand abbreviation, Label Type does not display

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