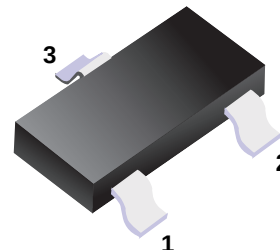


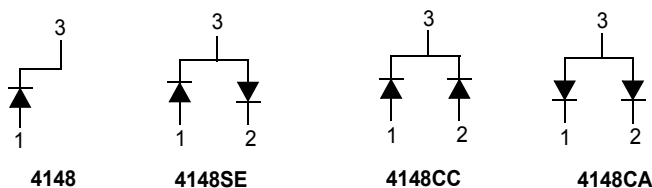
■ Switching Diodes

Features

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



■ Simplified outline(SOT-23)



■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Rating	Unit
Reverse Voltage	V _{RM}	100	V
Peak Repetitive Peak Reverse Voltage	V _{RRM}	75	
Working Peak Reverse Voltage	V _{RWM}		
DC Blocking Voltage	V _R		
RMS Reverse Voltage	V _{RMS}	53	mA
Average Rectified Output Current	I _O	150	
Peak Forward Surge Current	I _{FM}	300	
Peak Forward Surge Current @ t=1μs	I _{FSM}	2	A
@ t=1s		1	
Power Dissipation	P _d	350	mW
Thermal Resistance Junction to Ambient	R θ JA	357	°C/W
Junction Temperature	T _J	150	°C
Storage Temperature range	T _{stg}	-55 to 150	

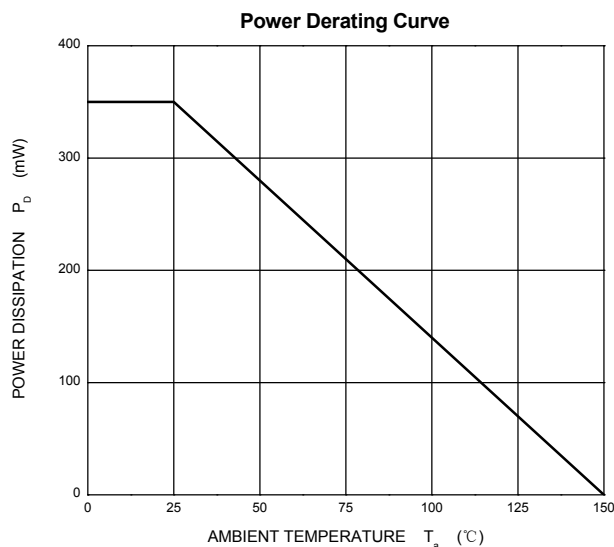
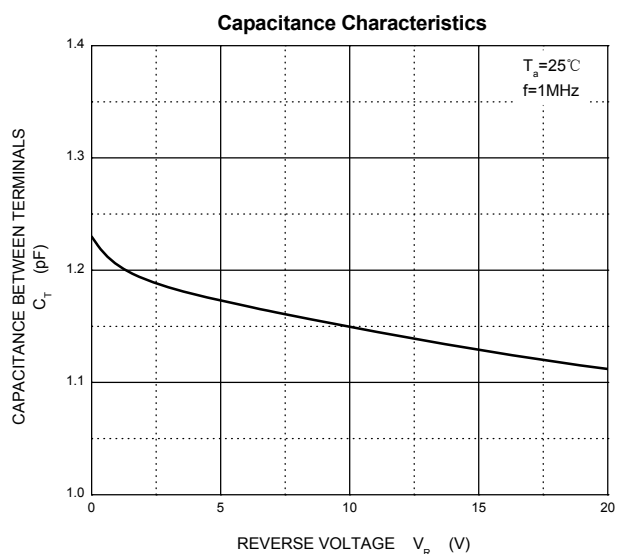
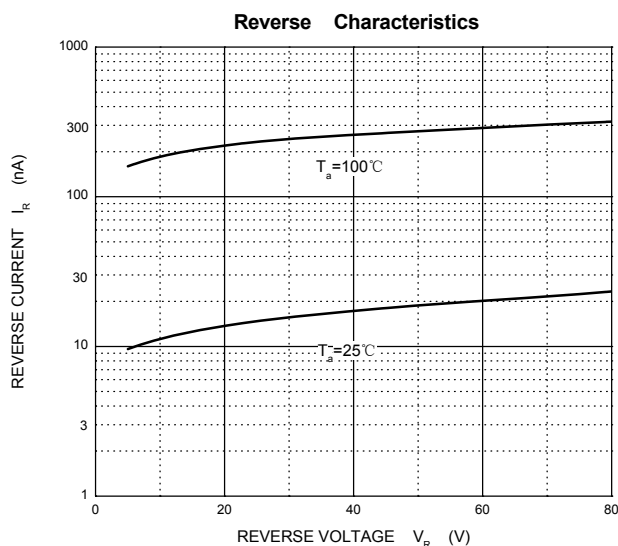
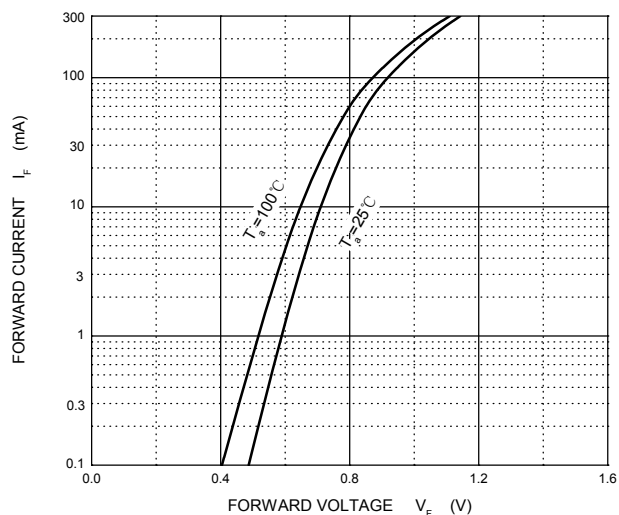
■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V_R	$I_R = 100 \mu\text{A}$	75			V
Forward voltage	V_{F1}	$I_F = 1 \text{ mA}$			0.715	
	V_{F2}	$I_F = 10 \text{ mA}$			0.855	
	V_{F3}	$I_F = 50 \text{ mA}$			1	
	V_{F4}	$I_F = 150 \text{ mA}$			1.25	
Reverse voltage leakage current	I_{R1}	$V_R = 75 \text{ V}$			2.5	μA
	I_{R2}	$V_R = 20 \text{ V}$			25	nA
Capacitance between terminals	C_T	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$			2	pF
Reverse recovery time	t_{rr}	$I_F = I_R = 10 \text{ mA}, I_{rr} = 0.1 \times I_R, R_L = 100 \Omega$			4	ns

■ Marking

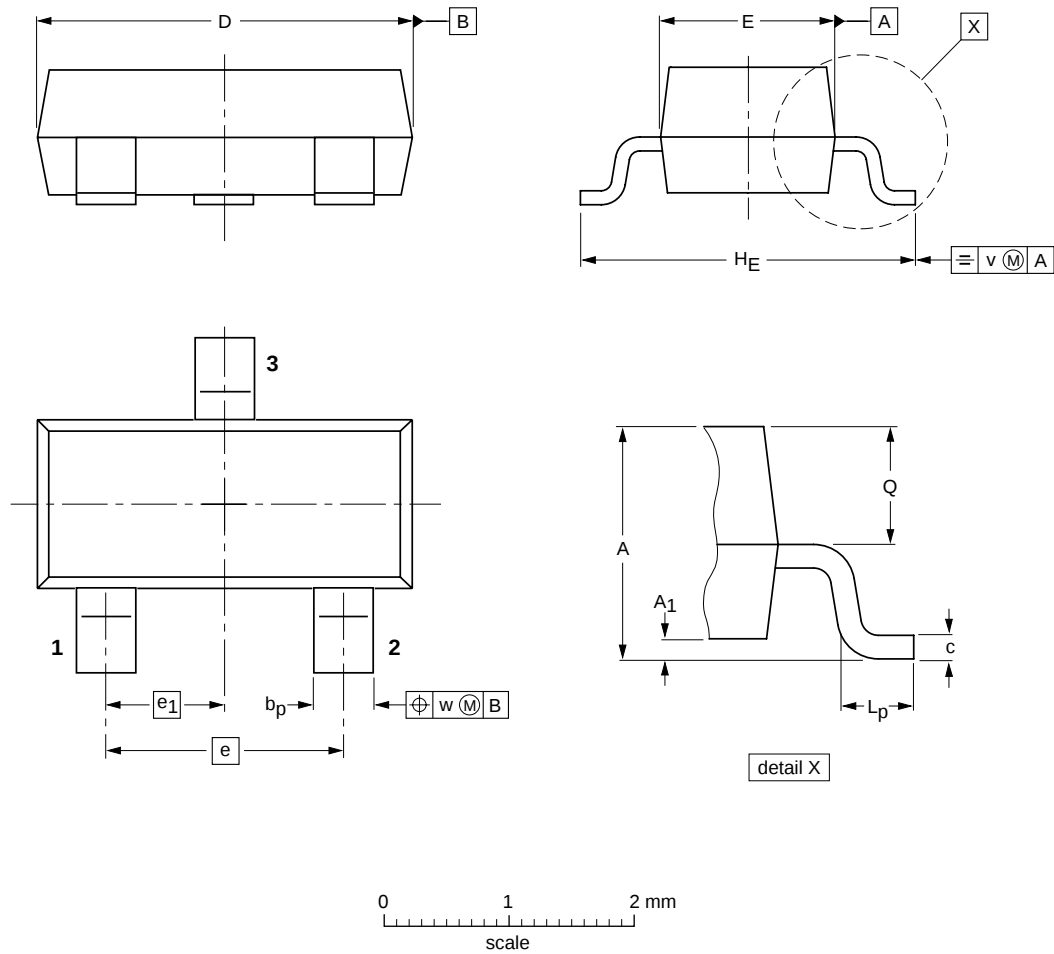
NO	MMBD4148	MMBD4148SE	MMBD4148CC	MMBD4148CA
Marking	A6	D4	D5	D6

■ Typical Characteristics



Package Outline

SOT-23



DIMENSIONS (mm are the original dimensions)

UNIT	A	A ₁ max.	b _p	c	D	E	e	e ₁	H _E	L _p	Q	v	w
mm	1.1 0.9	0.1	0.48 0.38	0.15 0.09	3.0 2.8	1.4 1.2	1.9	0.95	2.5 2.1	0.45 0.15	0.55 0.45	0.2	0.1

Summary of Packing Options

Package	Packing Description	Packing Quantity	Industry Standard
SOT-23	Tape/Reel, 7" reel	3000	EIA-481-1