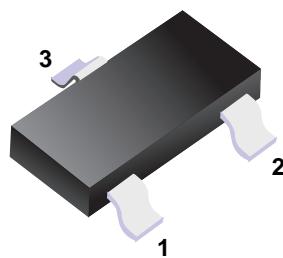
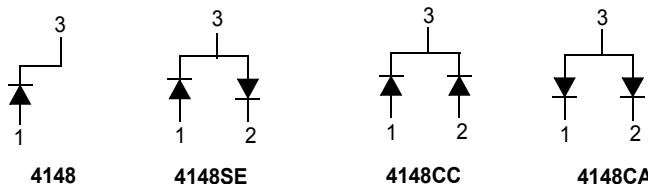


**■ Switching Diodes**
**■ Features**

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


**■ Simplified outline(SOT-23)**

**■ Absolute Maximum Ratings Ta = 25°C**

Parameter	Symbol	Rating	Unit
Reverse Voltage	V <sub>RM</sub>	100	V
Peak Repetitive Peak Reverse Voltage	V <sub>R<sub>RRM</sub></sub>		
Working Peak Reverse Voltage	V <sub>R<sub>W</sub>M</sub>	75	
DC Blocking Voltage	V <sub>R</sub>		
RMS Reverse Voltage	V <sub>R<sub>RMS</sub></sub>	53	
Average Rectified Output Current	I <sub>O</sub>	150	mA
Peak Forward Surge Current	I <sub>F<sub>M</sub></sub>	300	
Peak Forward Surge Current @ t=1μs @ t=1s	I <sub>F<sub>SM</sub></sub>	2 1	A
Power Dissipation	P <sub>d</sub>	350	mW
Thermal Resistance Junction to Ambient	R <sub>θ JA</sub>	357	°C/W
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature range	T <sub>stg</sub>	-55 to 150	

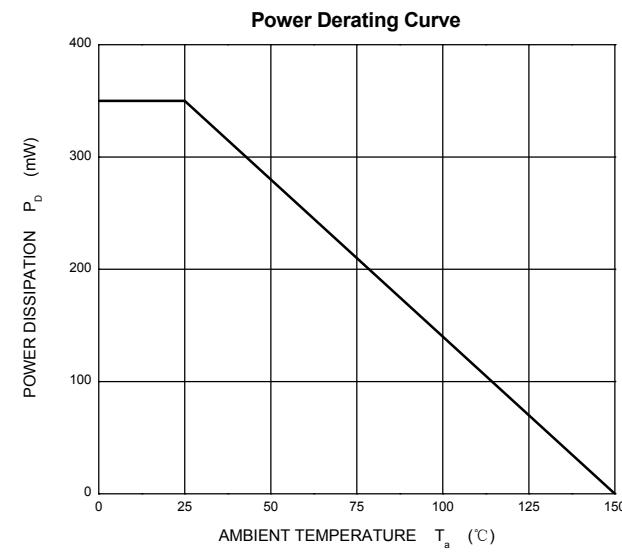
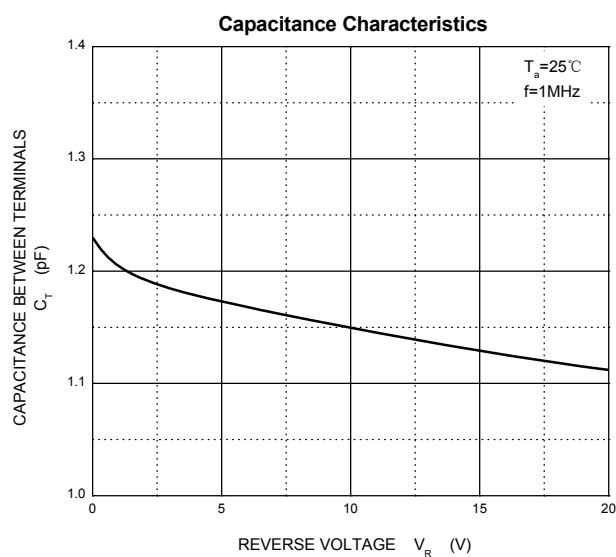
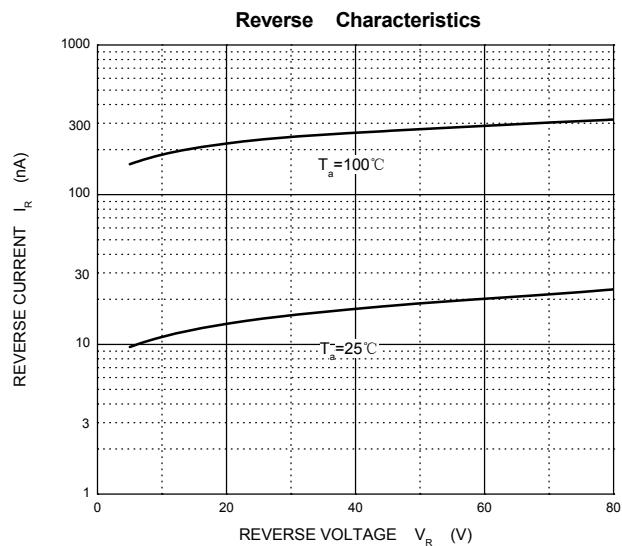
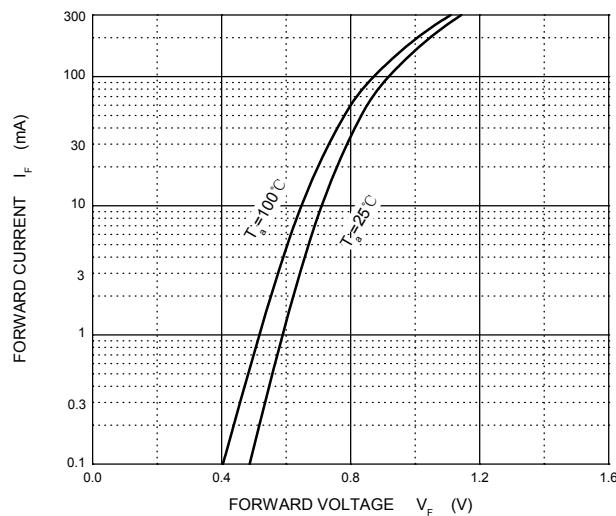
**■ Electrical Characteristics Ta = 25°C**

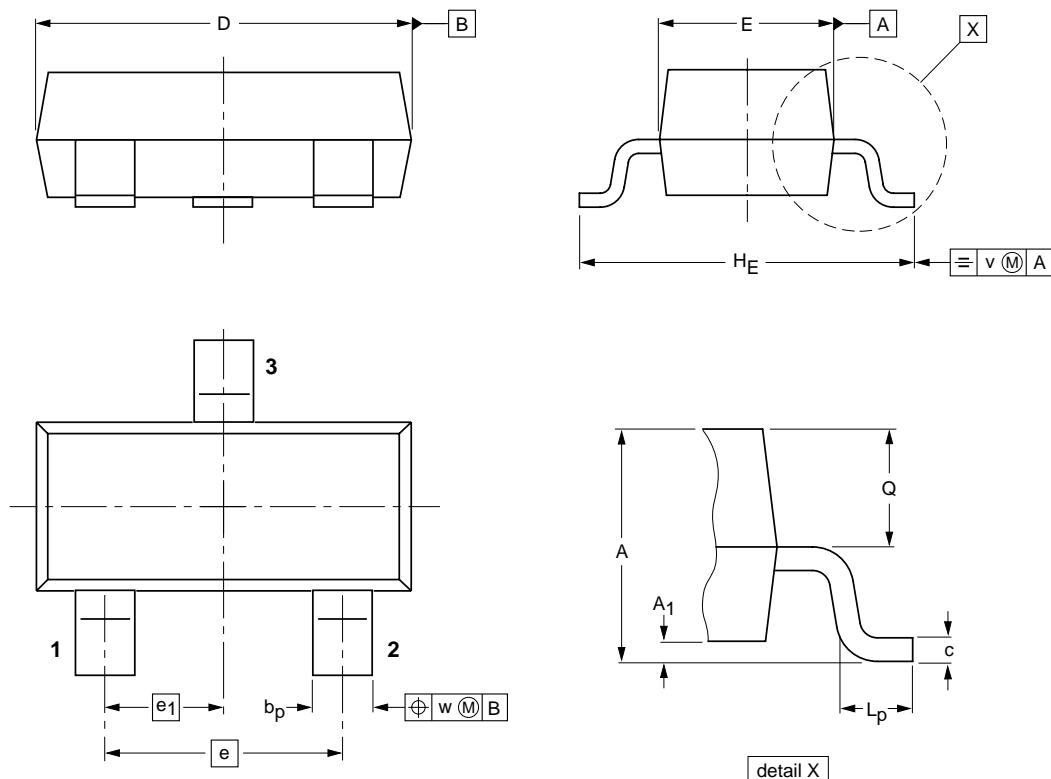
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V <sub>R</sub>	I <sub>R</sub> = 100 uA	75			V
Forward voltage	V <sub>F1</sub>	I <sub>F</sub> = 1 mA			0.715	
	V <sub>F2</sub>	I <sub>F</sub> = 10 mA			0.855	
	V <sub>F3</sub>	I <sub>F</sub> = 50 mA			1	
	V <sub>F4</sub>	I <sub>F</sub> = 150 mA			1.25	
Reverse voltage leakage current	I <sub>R1</sub>	V <sub>R</sub> = 75 V			2.5	uA
	I <sub>R2</sub>	V <sub>R</sub> = 20 V			25	nA
Capacitance between terminals	C <sub>T</sub>	V <sub>R</sub> = 0 V, f= 1 MHz			2	pF
Reverse recovery time	t <sub>rr</sub>	I <sub>F</sub> =I <sub>R</sub> =10mA, I <sub>rr</sub> =0.1xI <sub>R</sub> , R <sub>L</sub> =100Ω			4	ns

**■ Marking**

NO	MMBD4148	MMBD4148SE	MMBD4148CC	MMBD4148CA
Marking	5D	D4	D5	D6

### ■ Typical Characteristics



**■ SOT-23**


0      1      2 mm  
scale

**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