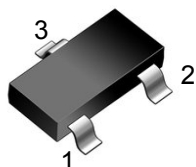


SOT-23



Features

Fast Switching Device (TRR <4.0 nS)
Power Dissipation of 350mW
High Stability and High Reliability
Low reverse leakage
Halogen free and RoHS compliant

Mechanical Data

SOT-23 Small Outline Plastic Package
Polarity: Color band denotes cathode end
Epoxy UL: 94V-0
Mounting Position: Any

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

Maximum Ratings & Thermal Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified.)

Parameters	Symbol	Value	Unit
Reverse Voltage	V _R	75	V
Peak Repetitive Reverse Voltage	V _{RRM}	100	V
Power Dissipation	P _d	350	mW
Average Rectified Current	I _O	200	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms; T _A =25°C	I _{FSM}	2.0	A
Operating junction temperature	T _j	150	°C
Storage temperature range	T _s	-55-+150	°C
Thermal Resistance from Junction to Ambient	R _{θJA}	357	°C/W

Valid provided that electrodes are kept at ambient temperature.

Electrical Characteristics

(Ratings at 25°C ambient temperature unless otherwise specified.)

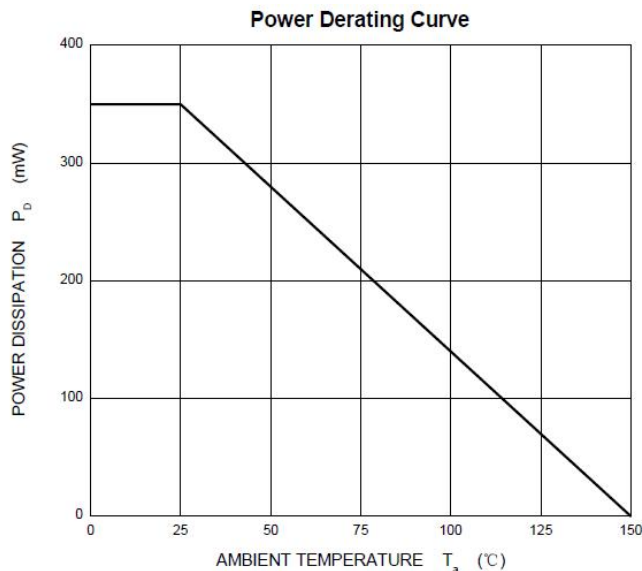
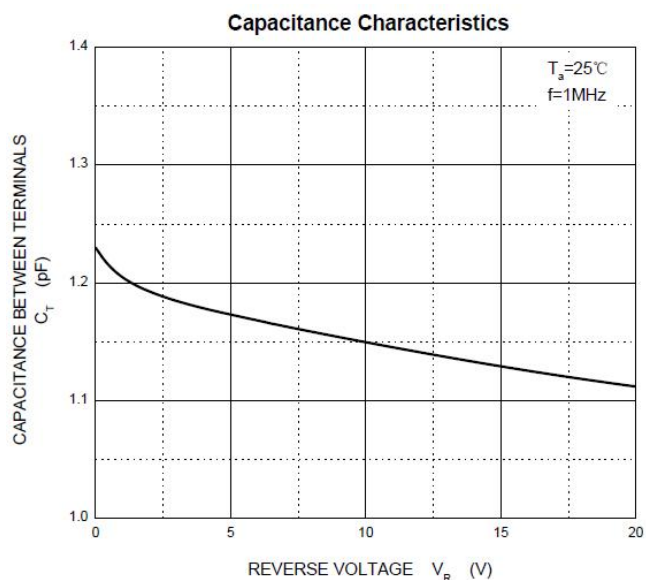
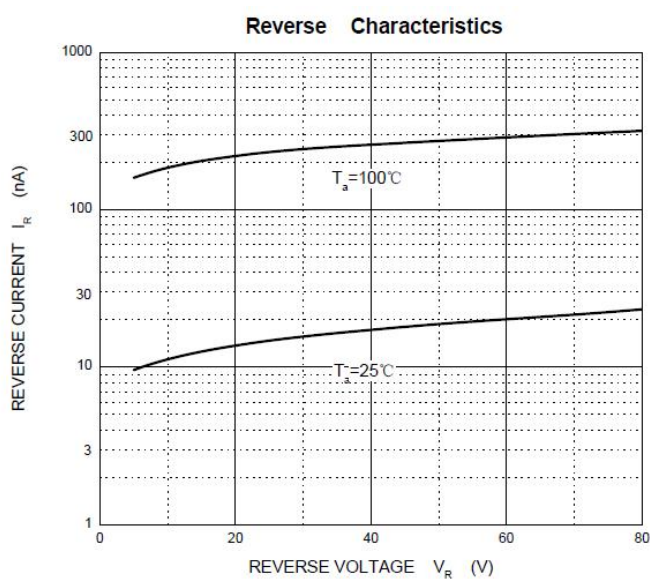
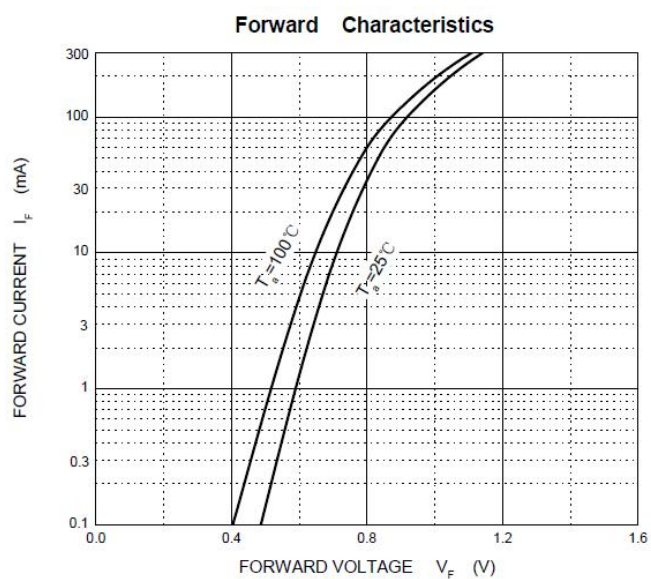
Symbols	Parameter	Test Condition	Limits		Unit
			Min	Max	
V(BR)	Reverse Voltage	IR=100uA	75		V
IR	Reverse Leakage Current	VR=75V	---	5.0	uA
		VR=25V	---	25	nA
VF	Forward Voltage	IF=10mA	---	1.00	V
TRR	Reverse Recovery Time	IF= IR=10mA	---	4	nS
		VR=6V, RL=100Ω			
		IRR=0.1 X IR			
CT	Capacitance	VR=0V, f=1MHZ	---	4	pF

Summary of Packing Options

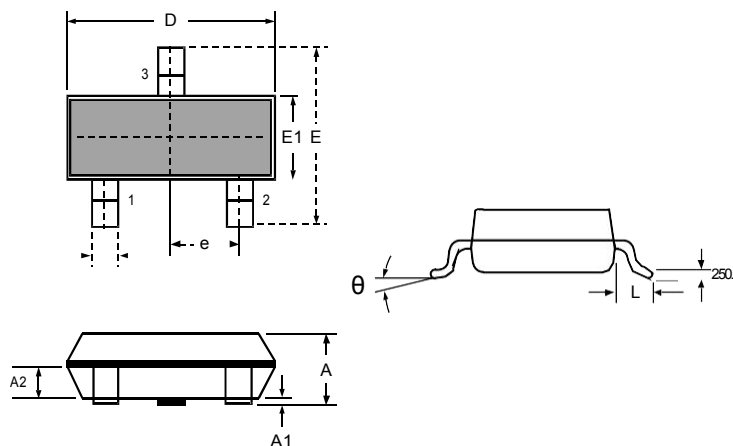
Package	Packing Description	Packing Quantity	Industry Standard
SOT-23	Tape/Reel, 7" reel	3000	EIA-481-1



Ratings and Characteristic Curves



Package Outline Dimensions: SOT-23



SYMBOL	MILLIMETER		INCHES	
	MIN	MAX	MIN	MAX
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
D	2.800	3.000	0.110	0.118
b	0.300	0.500	0.012	0.020
E	2.250	2.550	0.089	0.100
E1	1.200	1.400	0.047	0.055
e	0.950 BSC		0.037 BSC	
L	0.300	0.500	0.012	0.020
θ	0	8°	0	8°