



POWER SKY (H.K.) LTD.

SOT-23 Plastic-Encapsulate Diodes

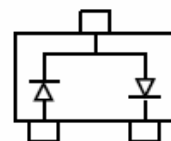
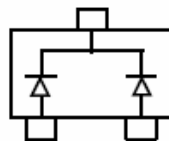
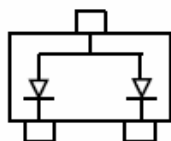
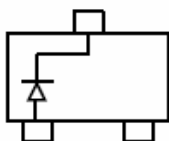
MMBD4148A/SE/CC/CA SWITCHING DIODES

SOT-23



FEATURES

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



MARKING:

MMBD4148A:5H

MMBD4148CA :D6

MMBD4148CC :D5

MMBD4148SE :D4

Maximum Ratings @T_A=25°C

Parameter	Symbol	Limits	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	$V_{R(RMS)}$	53	V
Forward Continuous Current	I_{FM}	300	mA
Average Rectified Output Current	I_O	200	mA
Peak forward surge current @=1.0μs @=1.0s	I_{FSM}	2.0 1.0	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}	-65~+150	°C

Electrical Ratings @T_A=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	$V_{(BR) R1}$	100			V	$I_R=100\mu A$
	$V_{(BR) R2}$	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

MMBD4148A/SE/CC/CA

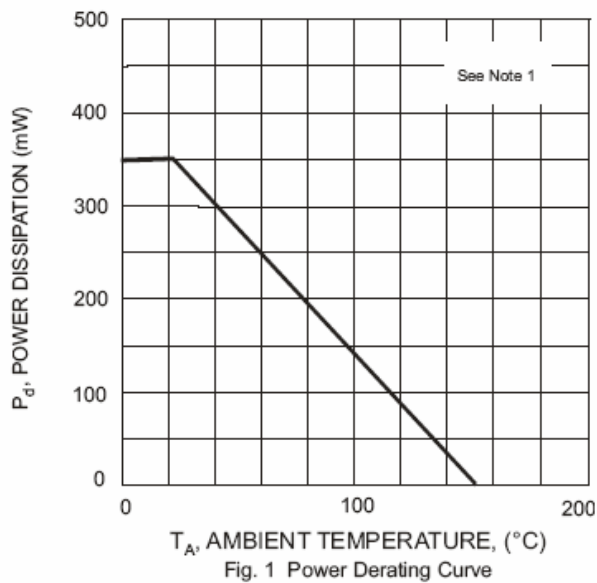


Fig. 1 Power Derating Curve

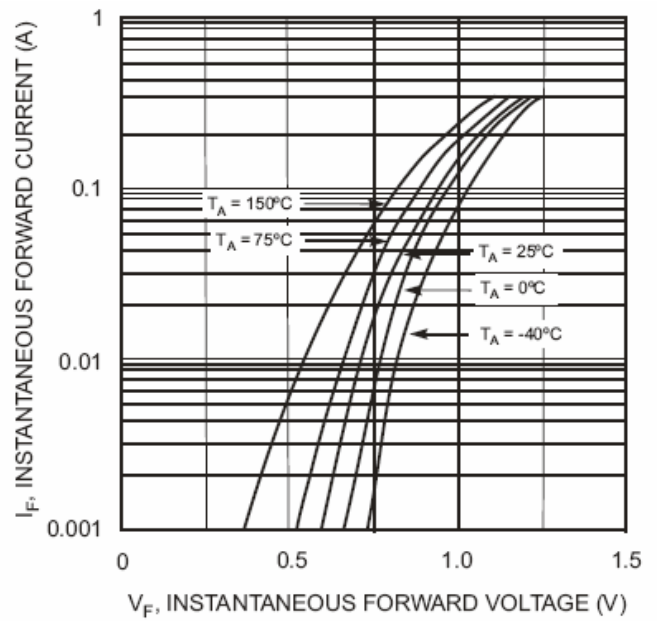


Fig. 2 Forward Characteristics

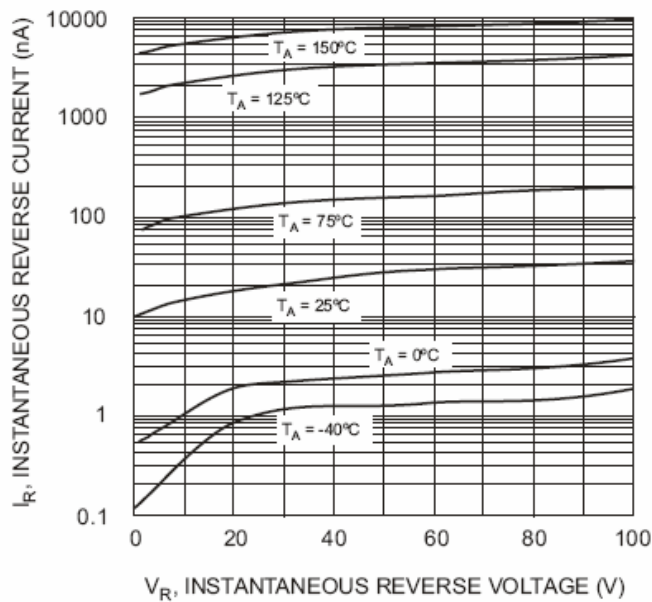


Fig. 3 Typical Reverse Characteristics

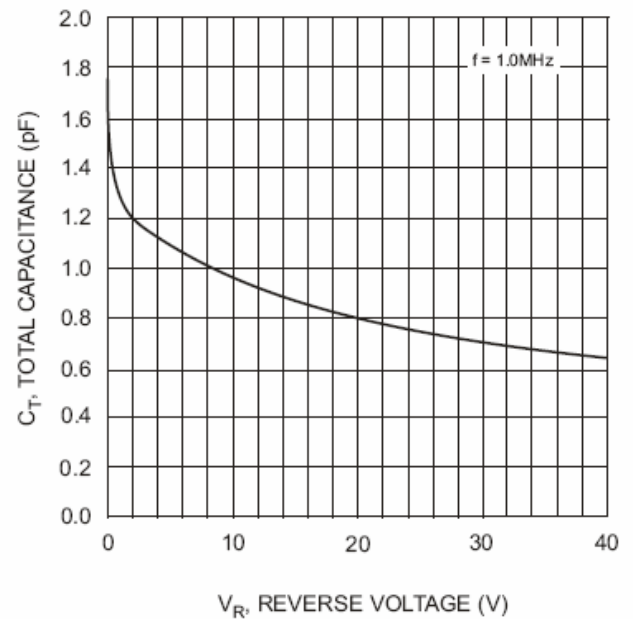


Fig. 4 Typical Capacitance vs. Reverse Voltage