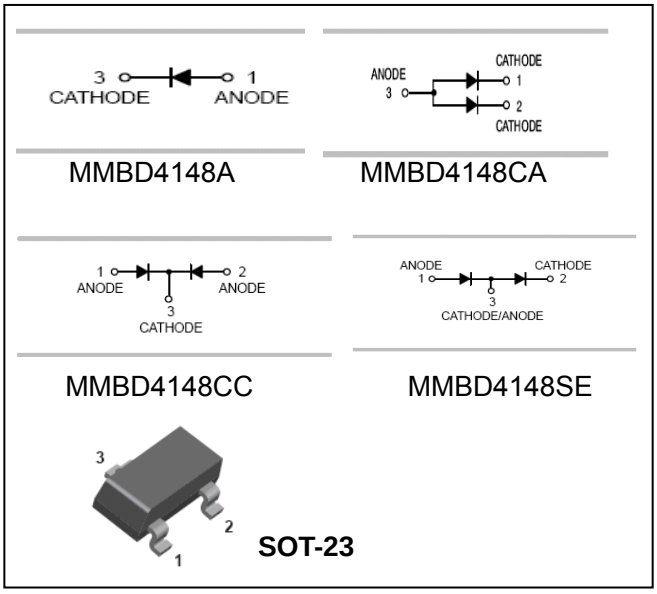
Surface mount switching diode **MMBD4148A/CA/CC/SE**

FEATURES

Lead-free

- Fast switching speed.
- High conductance.
- For general purpose switching applications.
- Surface mount package ideally suited for automatic insertion.



APPLICATIONS

- Small signal switching

ORDERING INFORMATION

Type No.	Marking	Package Code
MMBD4148A	5H	SOT-23
MMBD4148CA	D6	SOT-23
MMBD4148CC	D5	SOT-23
MMBD4148SE	D4	SOT-23

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Parameter	**Symbol**	**Limits**	**Unit**
DC Reverse Voltage	V_R	100	V
Forward Continuous Current(Max.)	I_{FM}	600	mA
Average rectified Current	$I_{F(AV)}$	200	mA
Recurrent peak forward current	I_{FRM}	700	mA
Non-repetitive peak forward surge current (1.0s) (1.0m)	I_{FSM}	1.0 2.0	A
Power Dissipation	P_d	350	mW
Thermal resistance,Junction to ambient	$R_{\theta JA}$	357	℃/W
Operating junction temperature	T_J	150	℃
Storage temperature range	T_{STG}	-55-150	℃

Surface mount switching diode **MMBD4148A/CA/CC/SE**

ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	$V_{(BR)R1}$	100			V	I_R=100μA
	$V_{(BR)R2}$	75			V	I_R=5μA
Forward voltage	V_F			1	V	I_F=10mA
Reverse current	I_{R1}			25	nA	V_R=20V
	I_{R2}			5	μA	V_R=75V
Diode Capacitance	C_D			4	pF	V_R=0V,f=1MHz
Reverse Recovery Time	t_{rr}			4	ns	I_F=10mA,V_R=6V I_{rr}=0.1*I_R,R_L=100Ω

TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

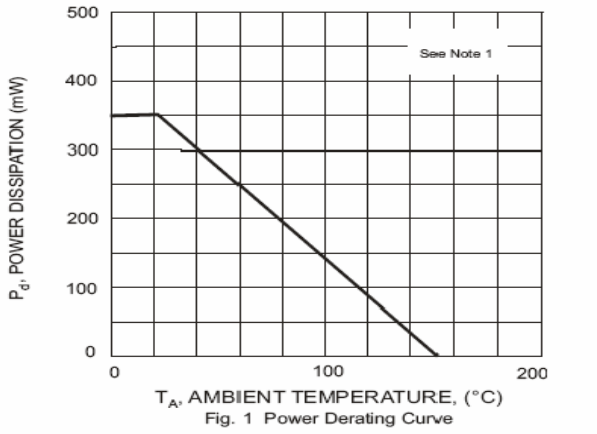


Fig. 1 Power Derating Curve

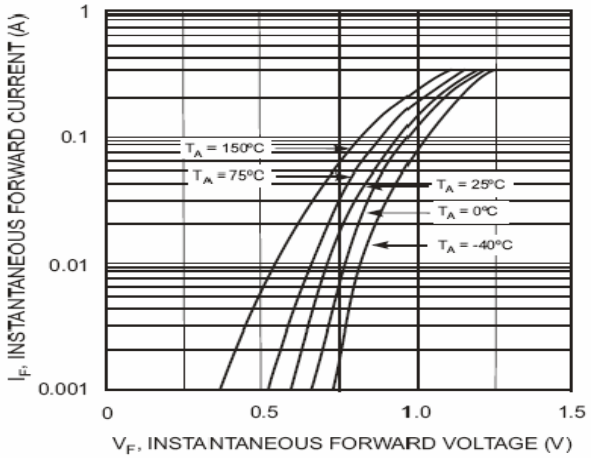


Fig. 2 Forward Characteristics

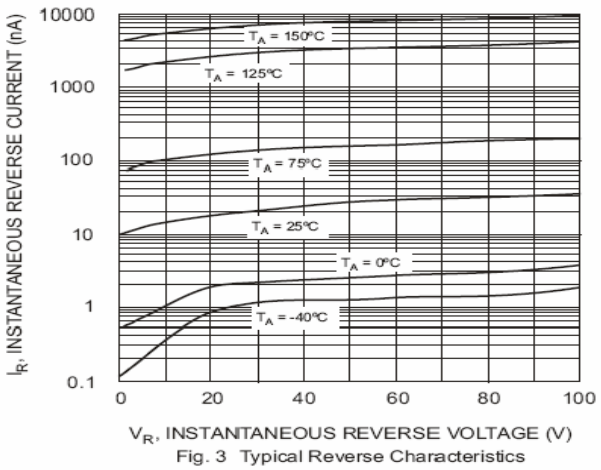


Fig. 3 Typical Reverse Characteristics

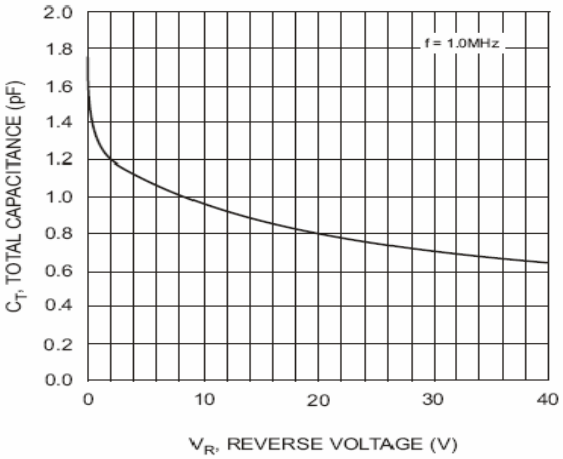
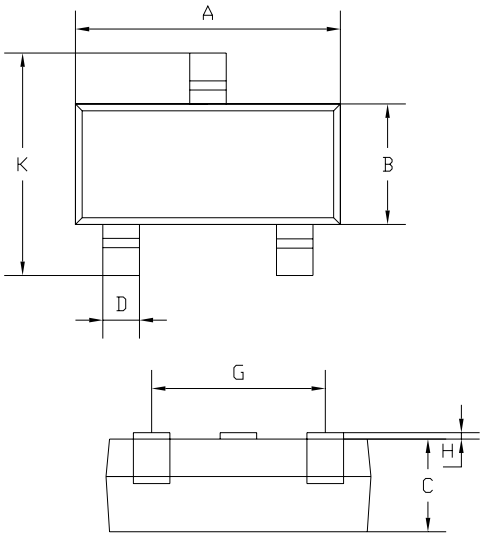


Fig. 4 Typical Capacitance vs. Reverse Voltage

Surface mount switching diode **MMBD4148A/CA/CC/SE**

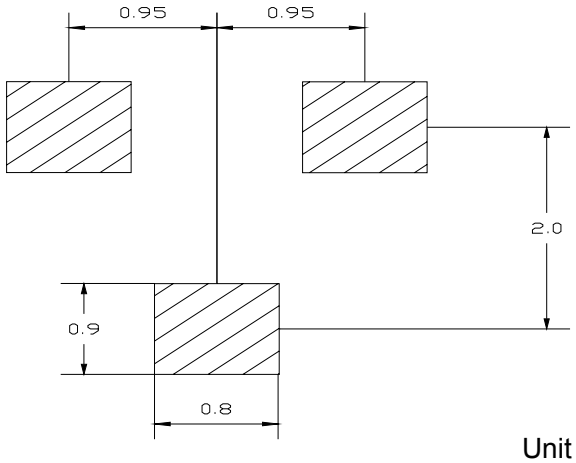
PACKAGE OUTLINE

Plastic surface mounted package SOT-23



SOT-23		
Dim	Min	Max
A	2.85	2.95
B	1.25	1.35
C	1.0Typical	
D	0.37	0.43
E	0.35	0.48
G	1.85	1.95
H	0.02	0.1
J	0.1Typical	
K	2.35	2.45
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

Device	Package	Shipping
MMBD4148A/CA/CC/SE	SOT-23	3000/Tape&Reel