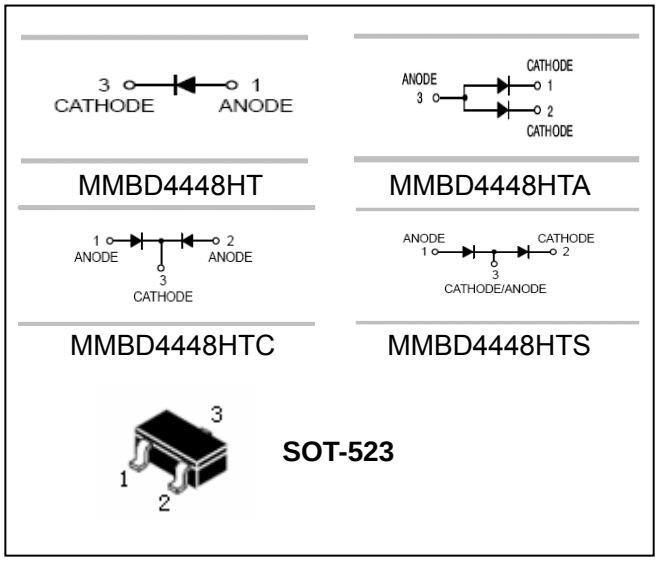
Surface Mount Fast Switching Diode

MMBD4448HT/HTA/HTC/HTS

FEATURES

- Ultra-Small surface mount package.
- Fast switching speed.
- For general purpose switching appilications.
- High conductance.

Lead-free



APPLICATIONS

- General purpose switching application.

ORDERING INFORMATION

Type No.	Marking	Package Code
MMBD4448HT	A3	SOT-523
MMBD4448HTA	A6	SOT-523
MMBD4448HTC	A7	SOT-523
MMBD4448HTS	AB	SOT-523

MAXIMUM RATING @ Ta=25℃ unless otherwise specified

Symbol	**Parameter**	**Value**	**Units**
V_{RM}	Non-repetitive peak reverse voltage	100	V
V_{RRM} V_{RWM} V_R	Peak repetitive reverse voltage Working peak reverse voltage DC reverse voltage	85	V
$V_{R(RMS)}$	RMS reverse voltage	57	V
I_{FM}	Forward continuous voltage(MAX.)	500	mA
I_O	Peak rectified output current	250	mA
I_{FSM}	Non-repetitive peak forward surge current @t=1.0μs @t=1.0s	 4.0 2.0	A
P_d	Power dissipation	150	mW
$R_{\theta JA}$	Thermal resistance junction to ambient	833	℃/W
T_j, T_{stg}	Junction and Storage Temperature	-65~150	℃

Surface Mount Fast Switching Diode

MMBD4448HT/HTA/HTC/HTS

ELECTRICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)R}$	I_R=2.5μA	80		V
Leakage current	I_R	V_R=70V V_R=20V		0.1 25	μA nA
Forward voltage	V_F	I_F=5mA I_F=10mA I_F=100mA I_F=150mA	0.62	0.72 0.855 1.0 1.25	V
Typical total capacitance	C_T	V_R=6V,f=1MHz		3.5	pF
Reverse recovery Time	t_{rr}	V_R=6V,I_F=5mA		4.0	ns

TYPICAL CHARACTERISTICS @ Ta=25℃ unless otherwise specified

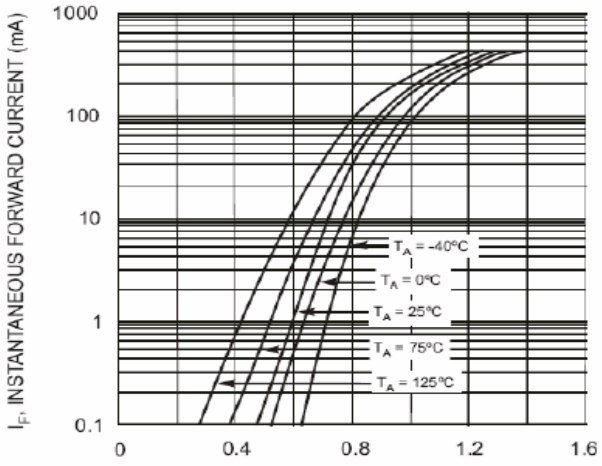


Fig. 1 Typical Forward Characteristics

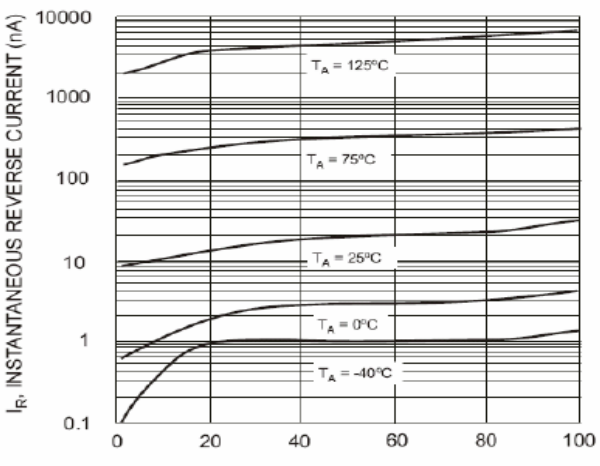


Fig. 2 Typical Reverse Characteristics

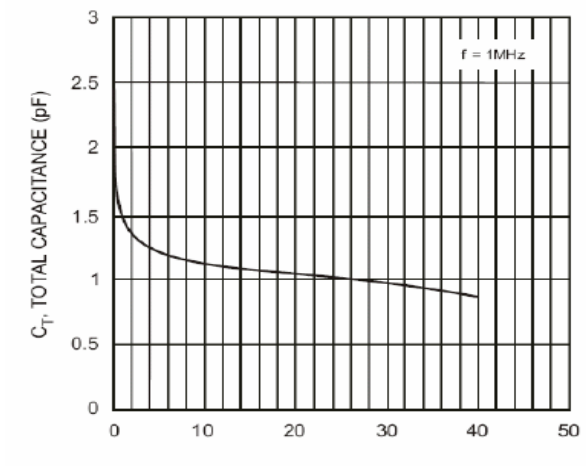


Fig. 3 Typical Capacitance vs. Reverse Voltage

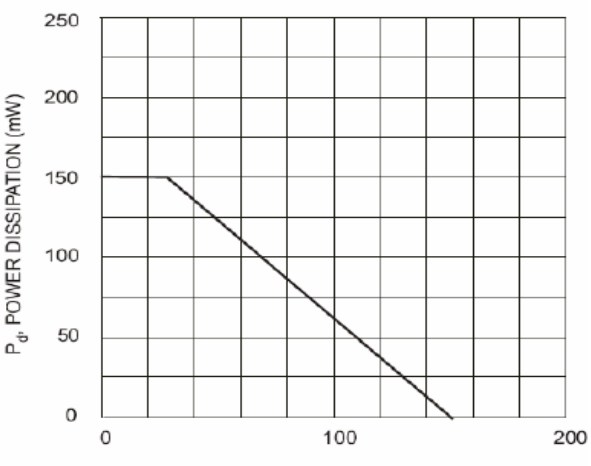


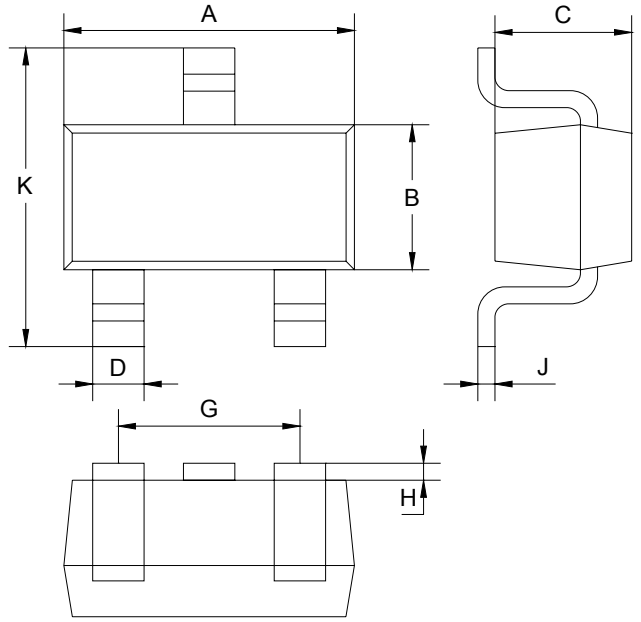
Fig. 4 Power Derating Curve, Total Package

Surface Mount Fast Switching Diode

MMBD4448HT/HTA/HTC/HTS

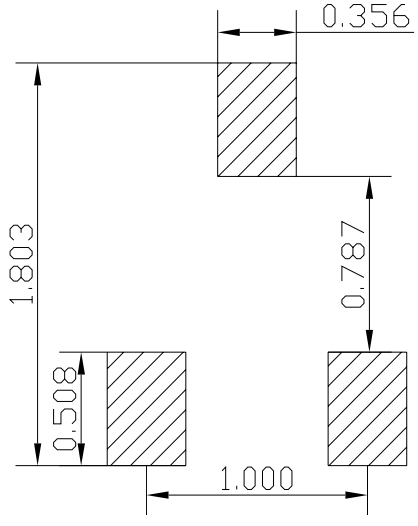
PACKAGE OUTLINE

Plastic surface mounted package SOT-523



SOT-523		
Dim	Min	Max
A	1.5	1.7
B	0.75	0.85
C	0.6	0.8
D	0.15	0.3
G	0.9	1.1
H	0.02	0.1
J	0.1Typical	
K	1.45	1.75
All Dimensions in mm		

SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

Device	Package	Shipping
MMBD4448HT/HTA/HTC/HTS	SOT-523	3000/Tape&Reel