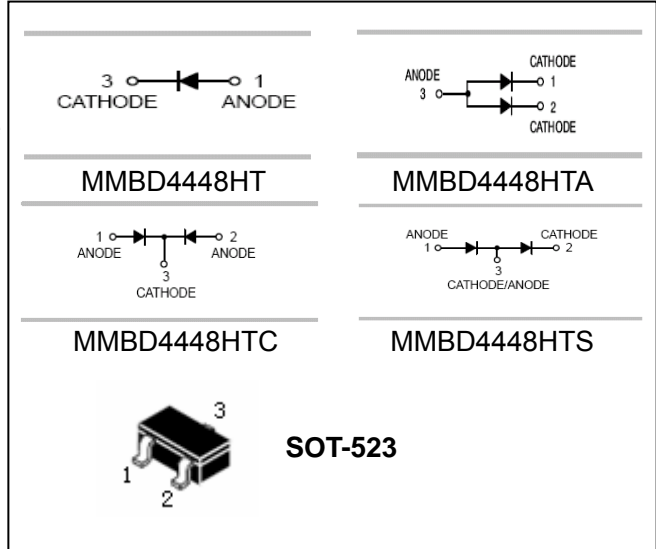


## Surface Mount Fast Switching Diode

### MMBD4448HT/HTA/HTC/HTS

#### FEATURES

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



#### 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°C unless otherwise specified

Symbol	Parameter	Value	Units
$V_{RM}$	Non-repetitive peak reverse voltage	100	V
$V_{RRM}$	Peak repetitive reverse voltage	85	V
$V_{RWM}$	Working peak reverse voltage		
$V_R$	DC reverse voltage		
$V_{R(RMS)}$	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	4.0
		@t=1.0s	2.0
$P_d$	Power dissipation	150	mW
$R_{\theta JA}$	Thermal resistance junction to ambient	833	°C/W
$T_j, T_{stg}$	Junction and Storage Temperature	-65~150	°C

## Surface Mount Fast Switching Diode

### MMBD4448HT/HTA/HTC/HTS

#### ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)R}$	$I_R=2.5\mu A$	80		V
Leakage current	$I_R$	$V_R=70V$ $V_R=20V$		0.1 25	$\mu A$ 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°C unless otherwise specified

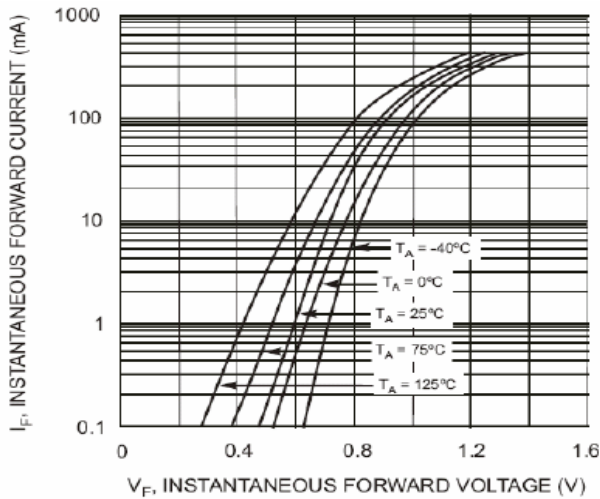


Fig. 1 Typical Forward Characteristics

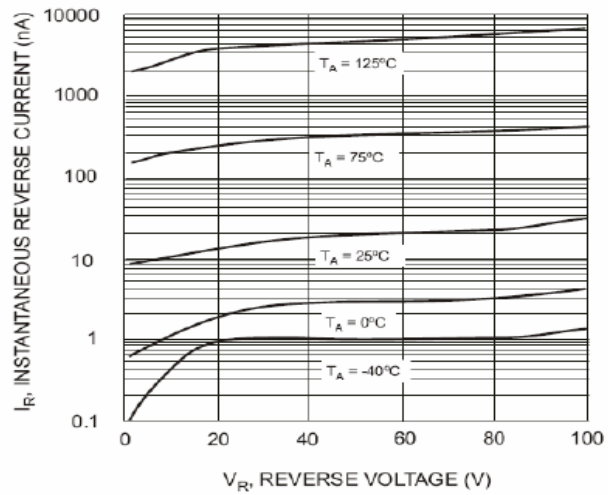


Fig. 2 Typical Reverse Characteristics

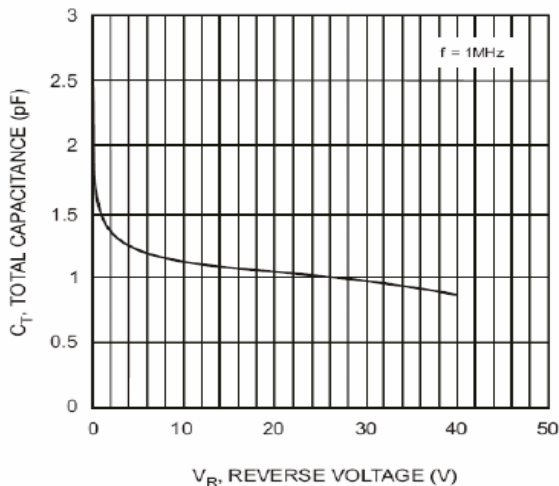


Fig. 3 Typical Capacitance vs. Reverse Voltage

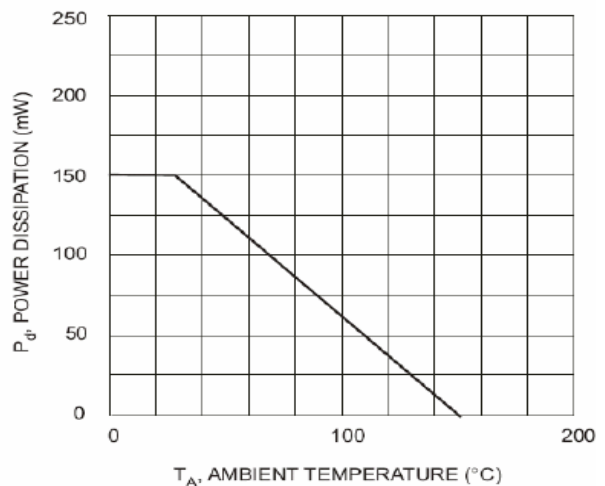


Fig. 4 Power Derating Curve, Total Package

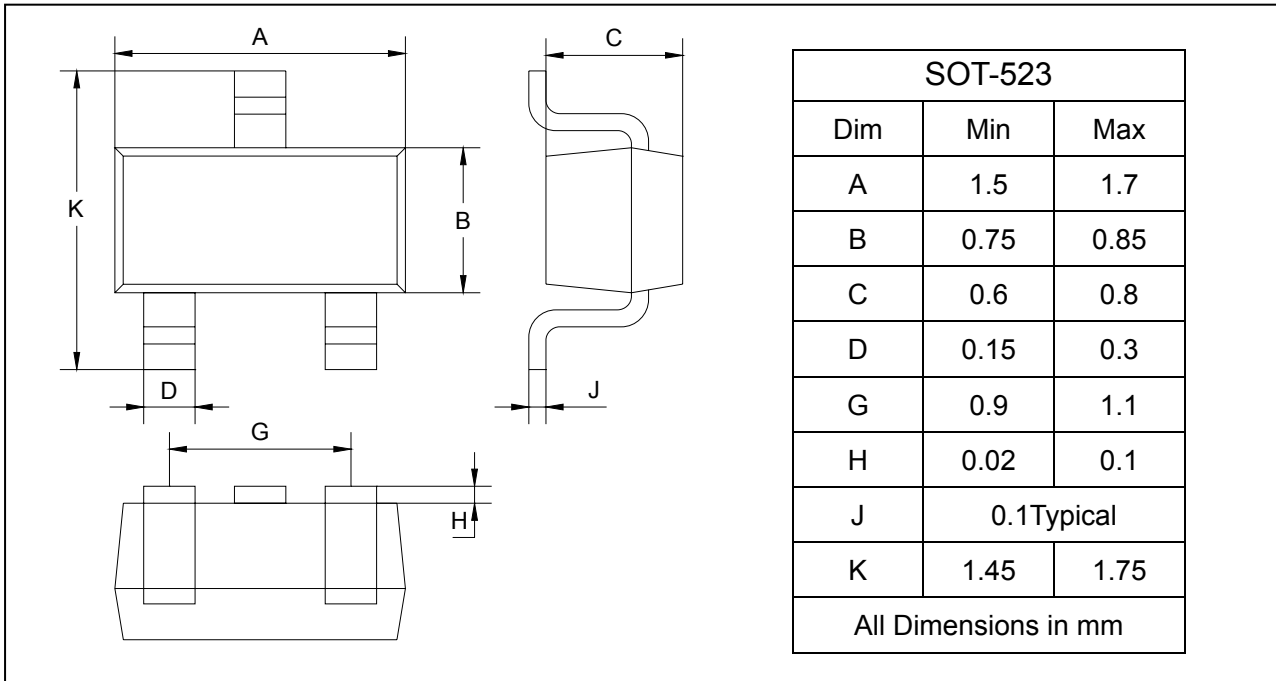
## Surface Mount Fast Switching Diode

### MMBD4448HT/HTA/HTC/HTS

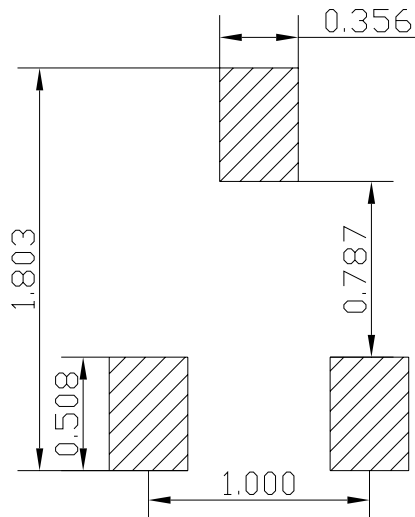
#### PACKAGE OUTLINE

Plastic surface mounted package

SOT-523



#### SOLDERING FOOTPRINT



Unit : mm

#### PACKAGE INFORMATION

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

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