Elektronische Bauelemente

MMBD4448HT Series

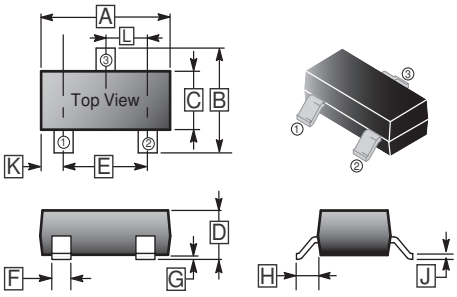
Plastic-Encapsulated Switching Diode

RoHS Compliant Product
A suffix of "-C" specifies halogen & lead-free

FEATURES

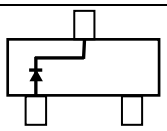
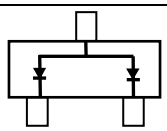
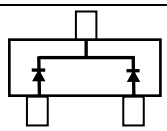
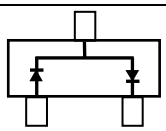
- Fast switching speed
- For General Purpose Switching Applications
- High Conductance

SOT-523



REF.	Millimeter Min.	Millimeter Max.	REF.	Millimeter Min.	Millimeter Max.
A	1.5	1.7	G	-	0.1
B	1.45	1.75	H	0.55 REF.	
C	0.75	0.85	J	0.1	0.2
D	0.7	0.9	K	-	
E	0.9	1.1	L	0.5 TYP.	
F	0.15	0.25	M	0.25	0.325

MARKING

Product	MMBD4448HT	MMBD4448HTA	MMBD4448HTC	MMBD4448HTS
Marking	A3	A6	A7	AB
Circuit				

PACKAGE INFORMATION

Package	MPQ	Leader Size
SOT-523	3K	7 inch

ABSOLUTE MAXIMUM RATINGS (T_A=25℃ unless otherwise specified)

Parameters		Symbol	Rating	Unit
Non-Repetitive Peak Reverse Voltage		V_{RM}	100	V
Peak Repetitive Reverse Voltage		V_{RRM}	80	V
Working Peak Reverse Voltage		V_{RWM}	80	V
DC Blocking Voltage		V_R	80	V
RMS Reverse Voltage		$V_{R(RMS)}$	57	V
Forward Continuous Current		I_{FM}	500	mA
Average Rectified Output Current		I_O	250	mA
Non-Repetitive Peak Forward Surge Current	t=1.0μs	I_{FSM}	4.0	A
	t=1.0s		1.5	
Power Dissipation		P_D	150	mW
Thermal Resistance, Junction to Ambient		$R_{\theta JA}$	833	℃ / W
Storage Temperature		T_{STG}	-65~150	℃

ELECTRICAL CHARACTERISTICS (T_A = 25℃ unless otherwise specified)

Parameters	Symbol	Min.	Max.	Unit	Test Conditions
Reverse Breakdown Voltage	V_R	80	-	V	I_R=2.5μA
Forward Voltage	V_{F1}	0.62	0.72	V	I_F=5mA
	V_{F2}	-	0.855	V	I_F=10mA
	V_{F3}	-	1	V	I_F=100mA
	V_{F4}	-	1.25	V	I_F=150mA
Maximum DC Reverse Current at rated DC blocking voltage	I_{R1}	-	0.1	μA	V_R=70V
	I_{R2}		25	nA	V_R=20V
Capacitance between terminals	C_T		3.5	pF	V_R=6V, f=1MHz
Maximum Reverse Recovery Time	T_{RR}	-	4	nS	V_R=6V, I_F=5mA

CHARACTERISTIC CURVES

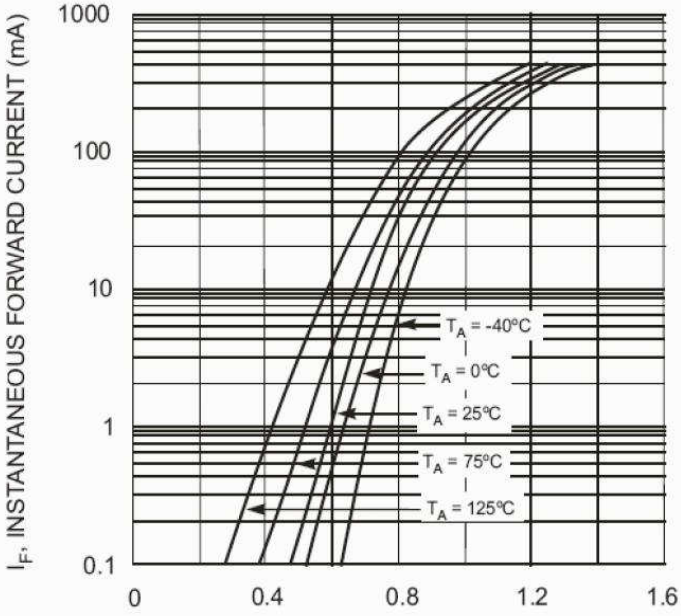


Fig. 1 Typical Forward Characteristics

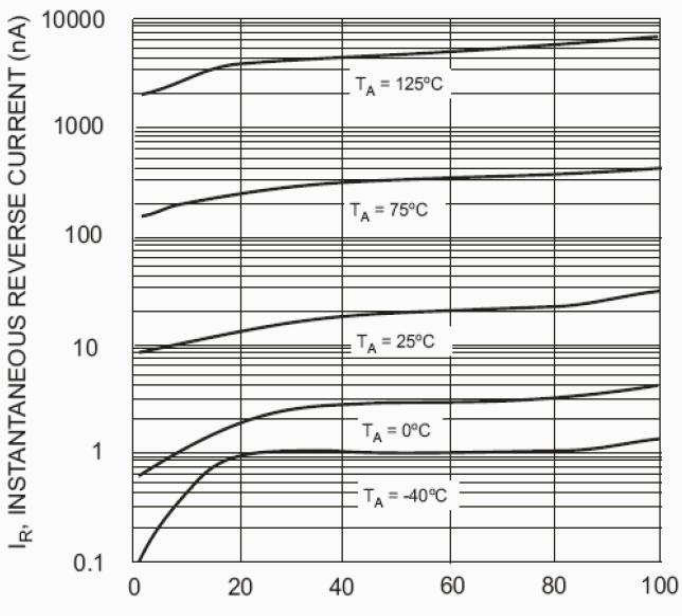


Fig. 2 Typical Reverse Characteristics

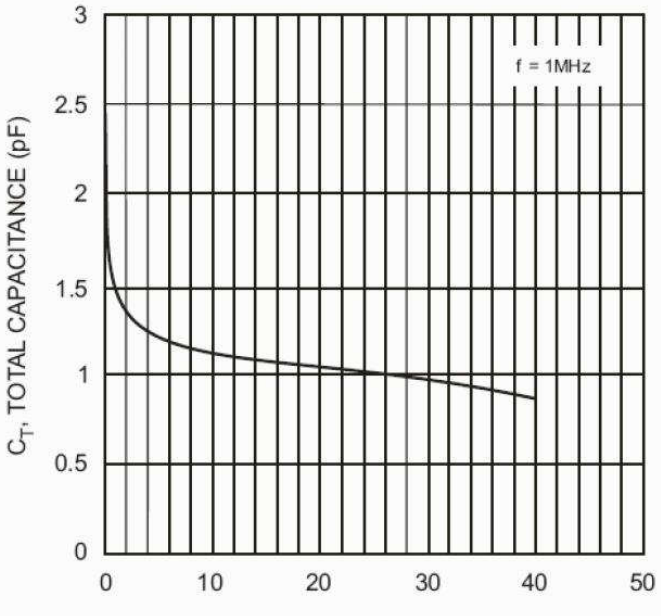


Fig. 3 Typical Capacitance vs. Reverse Voltage

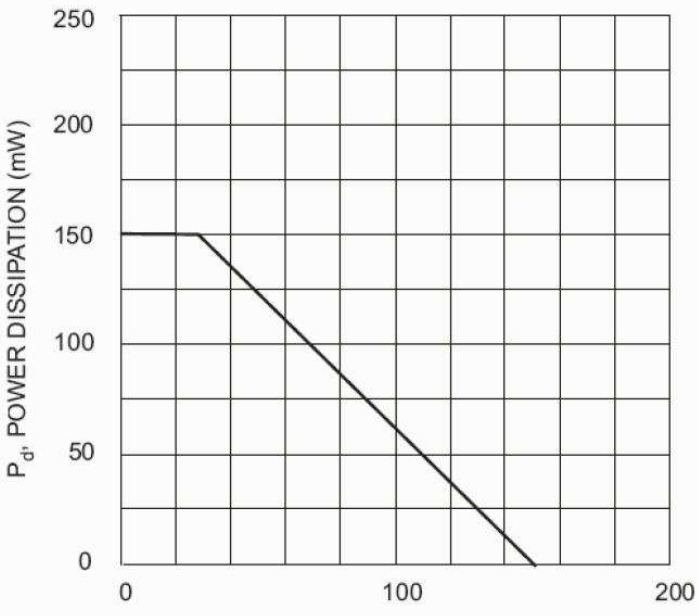


Fig. 4 Power Derating Curve, Total Package