

Features

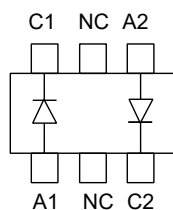
- Fast Switching Speed
- High Conductance
- Surface Mount Package Ideally Suited for Automatic Insertion
- For General Purpose Switching Applications
- Halogen Free Available Upon Request By Adding Suffix "-HF"
- Moisture Sensitivity Level 1
- Epoxy Meets UL 94 V-0 Flammability Rating
- Lead Free Finish/RoHS Compliant ("P" Suffix Designates RoHS Compliant. See Ordering Information)

Maximum Ratings

- Operating Junction Temperature Range: 150°C
- Storage Temperature Range: -65°C to +150°C
- Thermal Resistance: 833°C/W Junction to Ambient

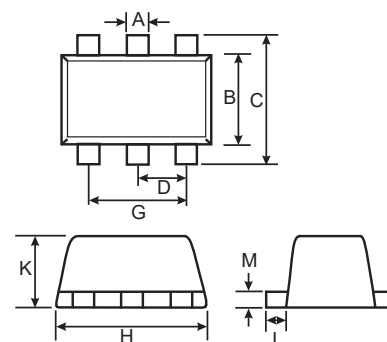
MCC Part Number	Device Marking	Repetitive Peak Reverse Voltage V_{RRM}	RMS Reverse Voltage $V_{R(RMS)}$	DC Blocking Voltage V_R
MMBD4448V	KAL	80V	57V	80V
Non-Repetitive Peak Reverse Voltage	V_{RM}	100V		
Working Peak Reverse Voltage	V_{RWM}	80V		
Forward Continuous Current	I_{FM}	500mA		
Average Rectified Output Current	I_o	250mA		
Peak Forward Surge Current	I_{FSM}	4.0A 2.0A	@1.0µs @1.0s	
Power Dissipation	P_D	150mW		

Internal Structure



150mW Switching Diode

SOT-563



DIM	INCHES		MM		NOTE
	MIN	MAX	MIN	MAX	
A	0.006	0.011	0.15	0.30	
B	0.043	0.051	1.10	1.30	
C	0.059	0.067	1.50	1.70	
D	0.020		0.50		
G	0.035	0.043	0.90	1.10	
H	0.059	0.067	1.50	1.70	
K	0.020	0.023	0.52	0.60	
L	0.004	0.011	0.10	0.30	
M	0.004	0.007	0.10	0.18	

Electrical Characteristics @ 25°C Unless Otherwise Specified

Minimum Breakdown Voltage	V_{BR}	80V	$I_R=2.5\mu A$
Maximum Forward Voltage	V_F	0.720V 0.855V 1.000V 1.250V	$I_F=5.0mA$ $I_F=10.0mA$ $I_F=50.0mA$ $I_F=150.0mA$
Maximum Peak Reverse voltage	I_R	0.1 μA 25nA	$V_R=70V$ $V_R=20V$
Maximum Total Capacitance	C_T	3.5pF	$V_R=6.0V, f=1.0MHz$
Maximum Reverse Recovery Time	t_{rr}	4.0ns	$V_R=6.0V, I_F=5.0mA$

Curve Characteristics

Fig. 1 - Typical Instantaneous Forward Characteristics

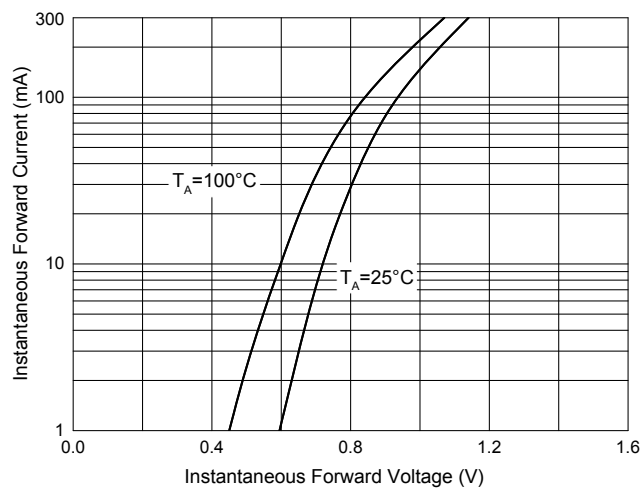


Fig. 2 - Typical Reverse Leakage Characteristics

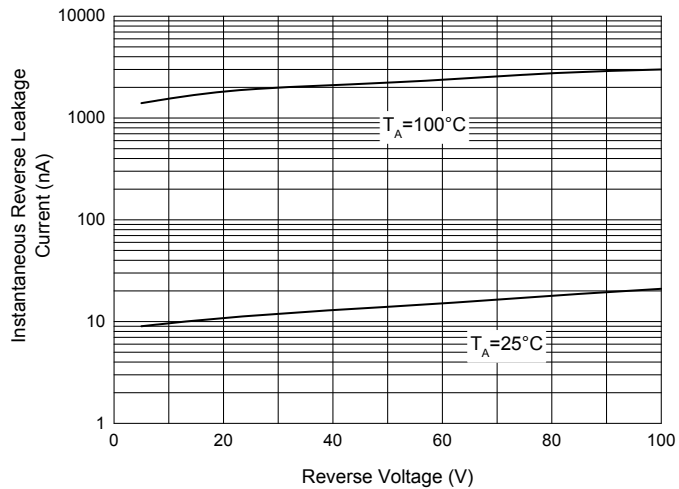
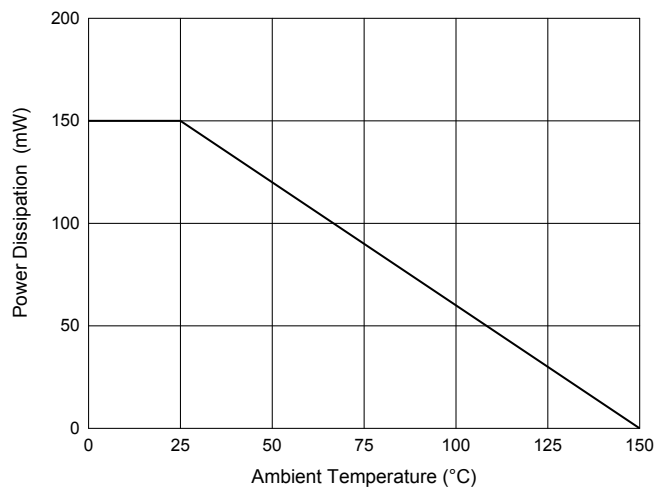


Fig. 3 - Power Derating Curve



Ordering Information

Device	Packing
Part Number-TP	Tape&Reel: 3Kpcs/Reel

Note : Adding "-HF" Suffix For Halogen Free, eg. Part Number-TP-HF

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