

# **Excellent Integrated System Limited**

Stocking Distributor

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Micro Commercial Components (MCC)
MMBD4448V-TP

For any questions, you can email us directly: <a href="mailto:sales@integrated-circuit.com">sales@integrated-circuit.com</a>

Datasheet of MMBD4448V-TP - DIODE ARRAY GP 80V 250MA SOT563

Contact us: sales@integrated-circuit.com Website: www.integrated-circuit.com



**Micro Commercial Components** 



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## MMBD4448V

### **Features**

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance
- Surface Mount Package Ideally Suited for Automatic Insertion
- Lead Free Finish/Rohs Compliant ("P"Suffix designates RoHS Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1
- Halogen free available upon request by adding suffix "-HF"

## **Maximum Ratings**

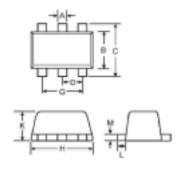
Symbol	Parameter	Rating	Unit
$V_{RM}$	Non-Repetitive Peak Reverse Voltage	100	V
$V_{RRM}$	Peak Repetitive Reverse Voltage		
$V_{RWM}$	Working Peak Reverse Voltage	80	V
$V_R$	DC Blocking Voltage		
$V_{R(RMS)}$	RMS Reverse Voltage	57	V
I <sub>FM</sub>	Forward Continuous Current	500	mA
Io	Average Rectified Output Current	250	mA
I <sub>FSM</sub>	Peak Forward Surge Current @1.0 µ s	4.0	^
	@1.0s	2.0	Α
R <sub>0 JA</sub>	Thermal Resistance Junction to Ambient	833	°C/W
P <sub>D</sub>	Power dissipation	150	mW
TJ	Junction Temperature	150	$^{\circ}$
T <sub>STG</sub>	Storage Temperature	-65 to +150	$^{\circ}$

#### Electrical Characteristics @ 25°C Unless Otherwise Specified

Symbol	Parameter	Min	Max	Test Conditions		
$V_{(BR)}$	Reverse Breakdown Voltage	80V		I <sub>R</sub> =2.5 μ A		
I <sub>R</sub>	Reverse Voltage Leakage Current		0.1 µ A 25nA	$V_R=70V$ $V_R=20V$		
V <sub>F</sub>	Forward Voltage		0.72V 0.855V 1.0V 1.25mV	I <sub>F</sub> =5mA I <sub>F</sub> =10mA I <sub>F</sub> =100mA I <sub>F</sub> =150mA		
C <sub>T</sub>	Total Capacitance		3.5pF	$V_R=6V$ , $f=1MHZ$		
t <sub>rr</sub>	Reverse Recovery Time		4ns	$V_R=6V$ , $I_F=5mA$		

## 150mW Switching Diodes

### **SOT-563**



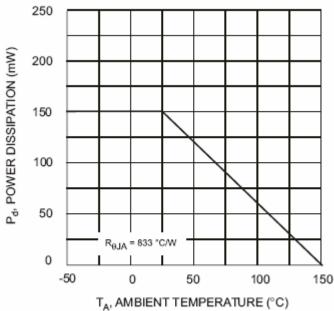
	DIMENSIONS					
	INCHES MM					
DIM	MIN	MAX	MIN	MAX	NOTE	
Α	.006	.011	0.15	0.30		
В	.043	.049	1.10	1.25		
С	.061	.067	1.55	1.70		
D	.020		0.50			
G	.035	.043	0.90	1.10		
Н	.059	.067	1.50	1.70		
K	.022	.023	0.56	0.60		
L	.004	.011	0.10	0.30		
М	.004	.007	0.10	0.18		

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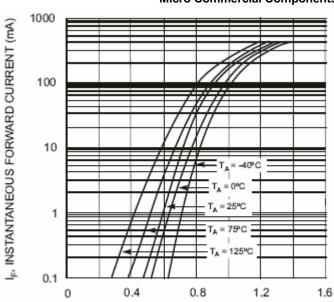
## MMBD4448V



**Micro Commercial Components** 







V<sub>F</sub>, INSTANTANEOUS FORWARD VOLTAGE (V) Fig. 2 Typical Forward Characteristics

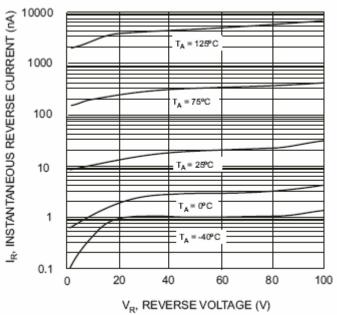
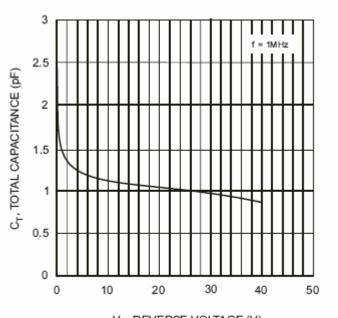
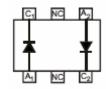


Fig. 3 Typical Reverse Characteristics



V<sub>R</sub>, REVERSE VOLTAGE (V) Fig. 4 Typical Capacitance vs. Reverse Voltage



**MARKING: KAL** 

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### **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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