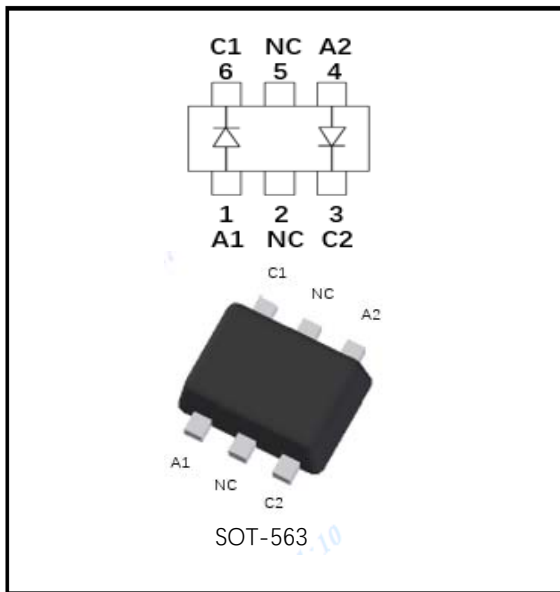


## Switching Diode



### Features

- Fast switching speed
- High Conductance
- Surface mount package ideally Suited for Automatic Insertion

### Mechanical Data

- **Package:** SOT-563
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Marking:** KAL
- **Solid point:** A1 positioning point

### ■Maximum Ratings (Ta=25°C Unless otherwise specified)

Item	Symbol	Unit	Value
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	V	100
Average Rectified Output Current	$I_O$	mA	200
Non-Repetitive Peak Forward Surge Current @t=8.3ms	$I_{FSM}$	A	1.5
Power Dissipation	$P_d$	mW	150
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	°C/W	833
Operation Junction Temperature	$T_J$	°C	-55 to +150
Storage Temperature	$T_{STG}$	°C	-55 to +150

### ■Electrical Characteristics (Ta=25°C unless otherwise specified)

Item	Symbol	Unit	Conditions	Value
Reverse Voltage	$V_R$	V	$I_R = 2.5\mu A$	80
Maximum Instantaneous Forward Voltage	$V_F$	V	$I_F = 5mA$	0.720
			$I_F = 10mA$	0.855
			$I_F = 50mA$	1.0
			$I_F = 150mA$	1.25
Maximum DC Reverse Current	$I_R$	nA	$V_R = 20V$	25
		$\mu A$	$V_R = 70V$	0.1
Maximum Junction Capacitance	$C_J$	pF	$f = 1.0MHz, V_R = 6.0V$	3.5
Maximum Reverse Recovery Time	$T_{rr}$	ns	$V_R = 6.0V, I_F = 5.0mA$	4

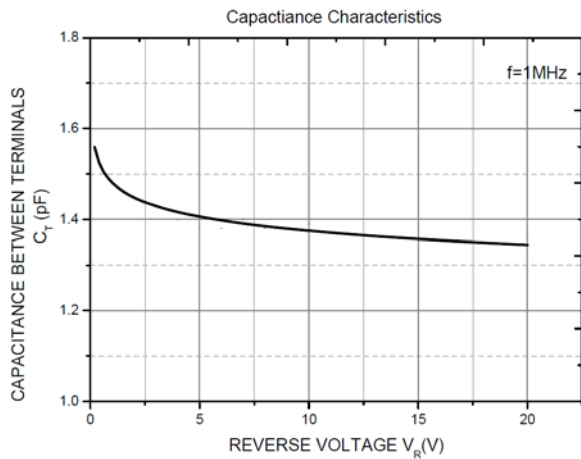
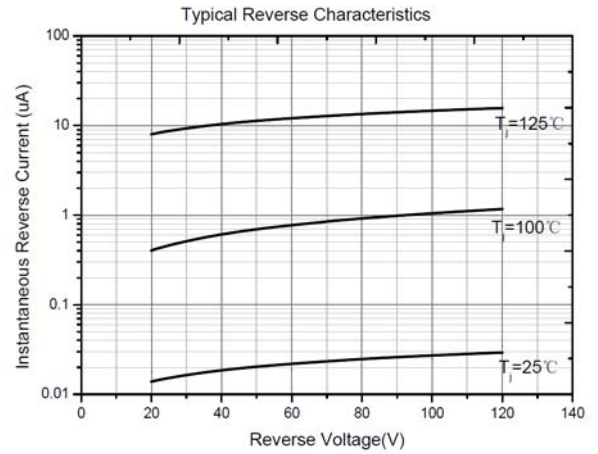
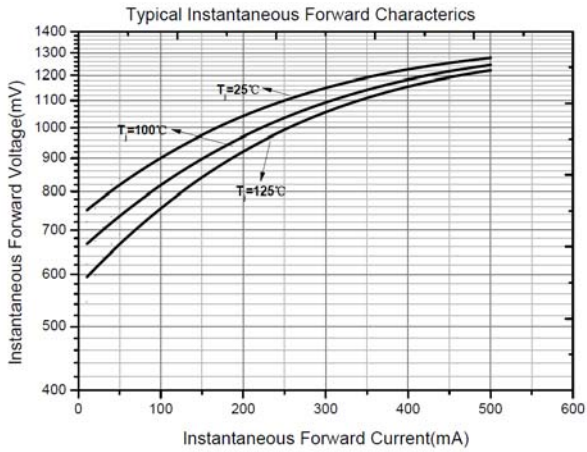


# MMBD4448V

## Ordering Information (Example)

Prefered P/N	Packing Code	Unit Weight(G)	Minimum Package(Pcs)	Inner Box Quantity(Pcs)	Outer Carton Quantity(Pcs)	Delivery Mode
MMBD4448V	F2	Approximate 0.0035	3000	30000	120000	7" reel

## Characteristics (Typical)

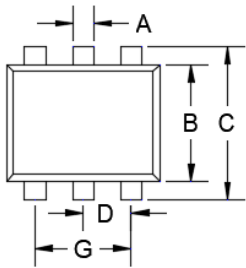




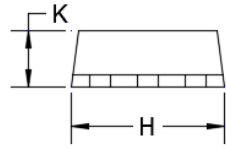
# MMBD4448V

## ■ Outline Dimensions

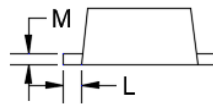
SOT-563



TOP VIEW



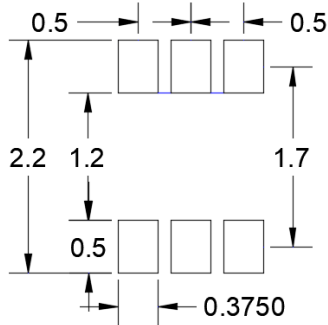
SIDE VIEW



SIDE VIEW

DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	MAX
A	0.006	0.011	0.150	0.300
B	0.043	0.051	1.100	1.300
C	0.059	0.067	1.500	1.700
D	0.016	0.024	0.400	0.600
G	0.035	0.043	0.900	1.100
H	0.059	0.067	1.500	1.700
K	0.021	0.026	0.550	0.650
L	0.004	0.011	0.100	0.300
M	0.004	0.007	0.100	0.180

## ■ Suggested Pad Layout



单位: mm

SUGGESTED SOLDER PAD LAYOUT



## Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website [http:// www.21yangjie.com](http://www.21yangjie.com) , or consult your nearest Yangjie's sales office for further assistance.