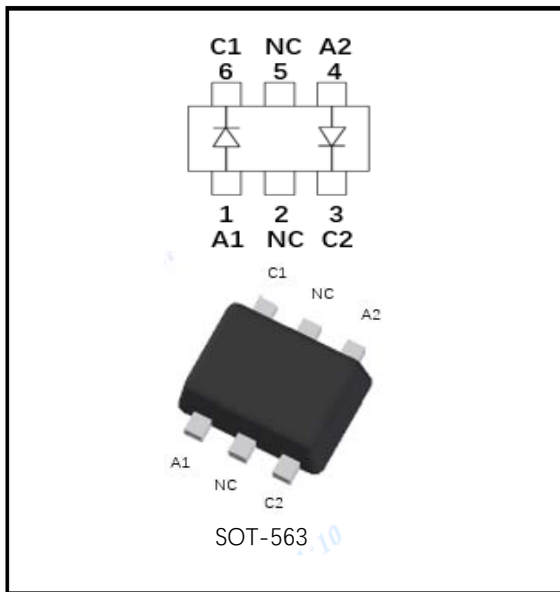


Switching Diode



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
		μA	$V_R = 70V$	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

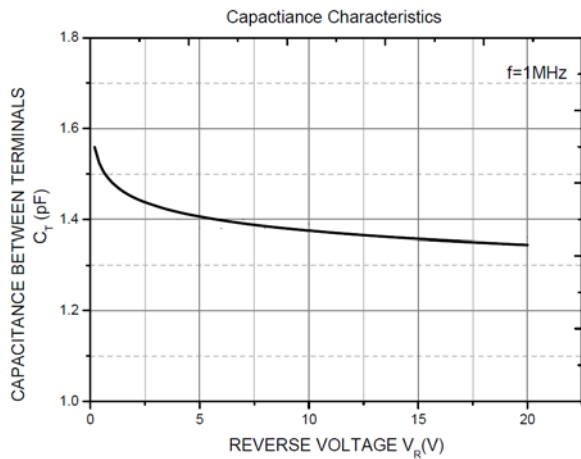
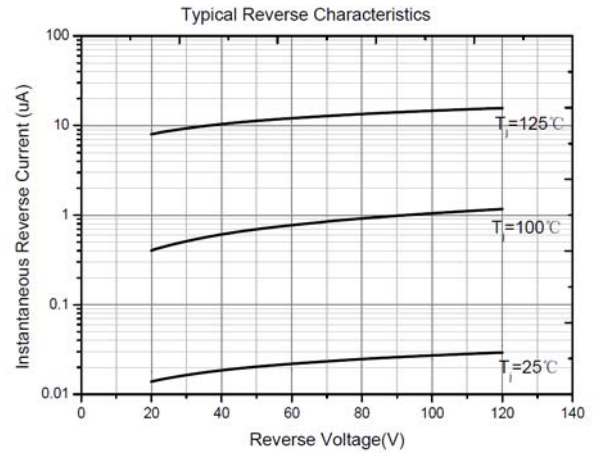


MMBD4448V

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

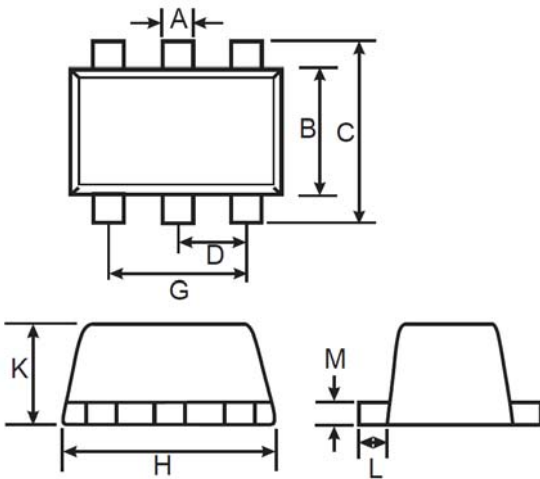
Characteristics (Typical)





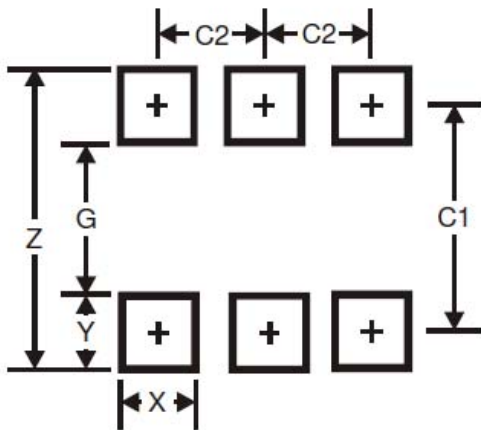
MMBD4448V

■ SOT-563 Package Outline Dimensions



DIM	DIMENSIONS			
	INCHES		MM	
	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	0.016	0.024	0.40	0.60
G	0.035	0.043	0.90	1.10
H	0.059	0.067	1.50	1.70
K	0.021	0.026	0.55	0.65
L	0.004	0.011	0.10	0.30
M	0.004	0.007	0.10	0.18

■ SOT-563 Suggested Pad Layout



Dimensions	Value (in mm)
Z	2.2
G	1.2
X	0.375
Y	0.5
C1	1.7
C2	0.5



Disclaimer

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