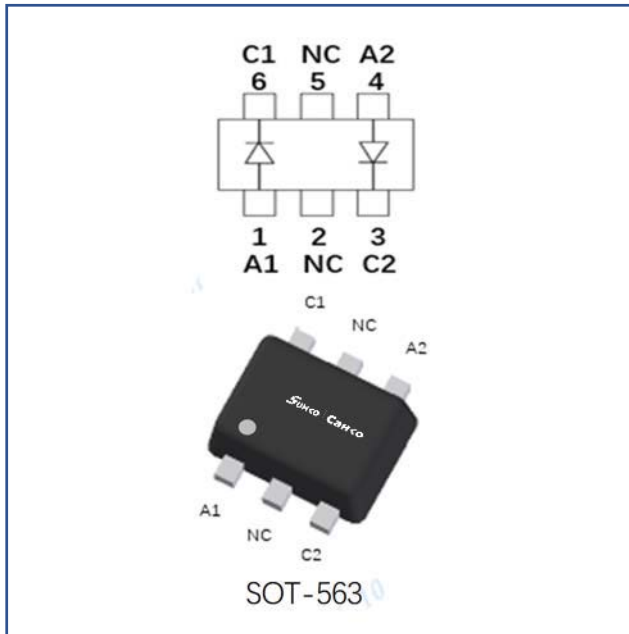


MMBD4448V

Switching Diode



Features

- Moisture sensitivity level 1
- Reverse voltage: 100V
- Average forward current : 200mA

Application

- High frequency rectifier
- Signal switching

Mechanical data

- **Package:** SOT-563
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102

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

Item	Symbol	Unit	Value
Device marking code			KAL
Continuous reverse voltage	V_R	V	100
Forward continuous current	I_F	mA	200
Non-repetitive peak forward surge current @ t=8.3ms half-sine wave	I_{FSM}	A	1.5
Non-repetitive surge peak forward current @ t=1ms square wave			1.6
Power dissipation	P_D	mW	150
Junction temperature	T_J	°C	-55 to +150
Storage temperature	T_{STG}	°C	-55 to +150

MMBD4448V

■ Electrical Characteristics (T_a=25°C Unless otherwise specified)

Item	Symbol	Unit	Conditions	Min	Typ	Max
Reverse voltage	V _R	V	I _R =2.5uA	80		
Forward voltage	V _{F1}	V	I _F =5mA			0.720
	V _{F2}	V	I _F =10mA			0.855
	V _{F3}	V	I _F =50mA			1.0
	V _{F4}	V	I _F =150mA			1.25
Reverse current	I _{R1}	nA	V _R =20V			25
	I _{R2}	uA	V _R =70V			0.1
Junction capacitance	C _j	pF	f=1.0MHz, V _R =6.0V			3.5
Reverse recovery time	T _{rr}	ns	V _R =6.0V, I _F =5.0mA			4

■ Thermal Characteristics

Parameter	Symbol	Unit	Value
Thermal resistance, junction-to-ambient	R _{θJ-A} ⁽¹⁾	°C/W	833
Thermal resistance, junction-to-case	R _{θJ-C} ⁽¹⁾	°C/W	667

Note:

(1) Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 25.4mm*25.4mm copper pad areas

MMBD4448V

■ Characteristics

Fig 1: P_D -Ta Curve

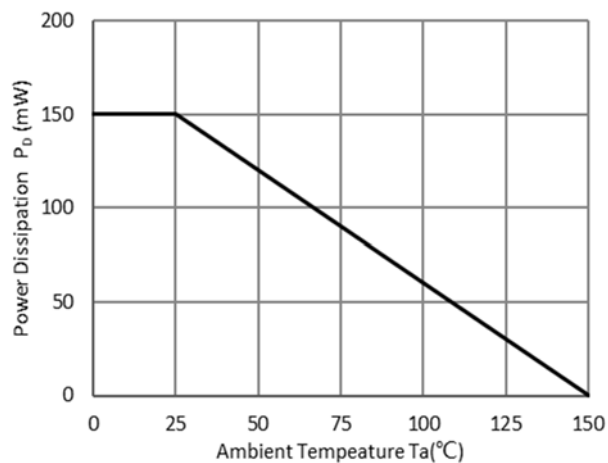


Fig 2: Capacitance Capability

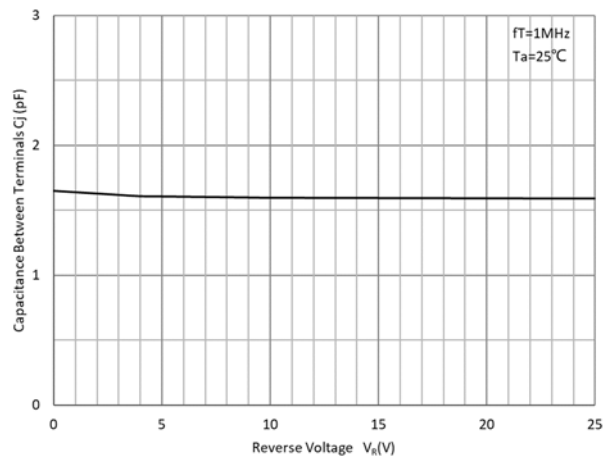


Fig 3: Typical Forward Characteristics

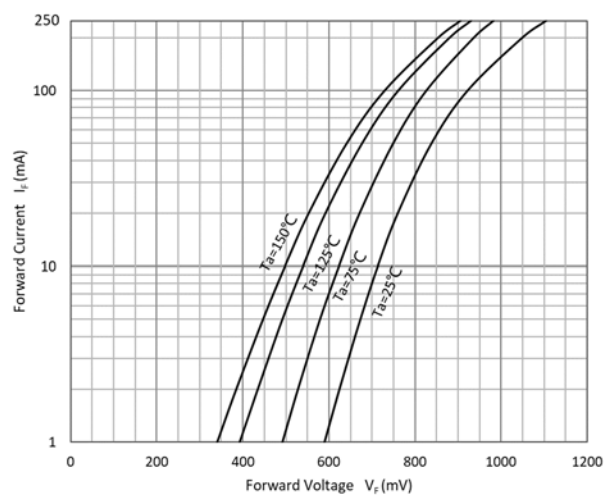
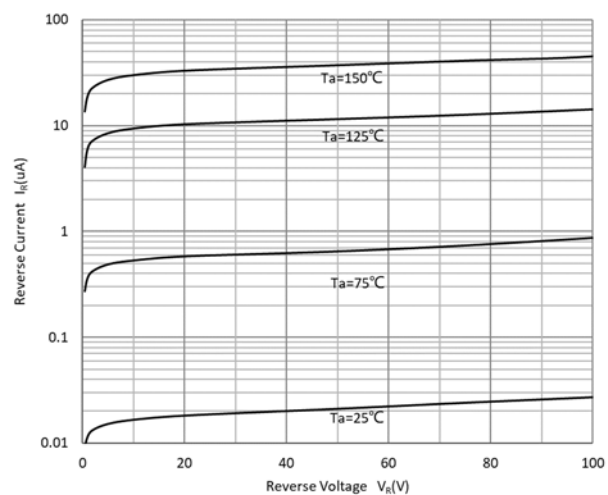


Fig 4: Typical Reverse Characteristics

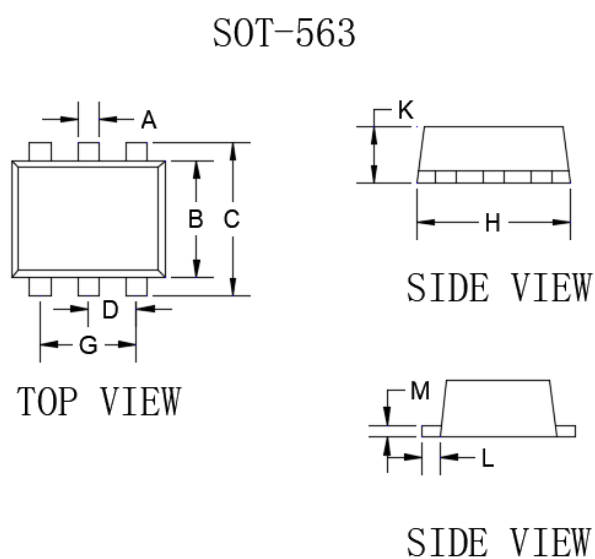


MMBD4448V

■ Ordering Information

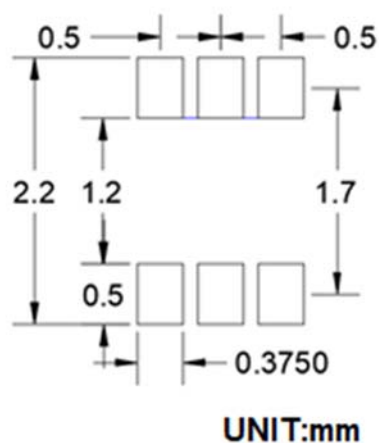
Preferred P/N	Packing code	Unit weight(g)	Minimum package(pcs)	Inner box quantity(pcs)	Outer carton quantity(pcs)	Delivery mode
MMBD4448V	F2	Approximate 0.0035	3000	30000	120000	7" reel

■ Outline Dimensions



DIM	DIMENSIONS			
	INCHES		MM	
	MIN	MAX	MM	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



MMBD4448V

Disclaimer

The information presented in this document is for reference only. Shanghai Sunco Electronics 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), Russiansunco 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.russiansunco.com](http://www.russiansunco.com) , or consult your nearest Russiansunco's sales office for further assistance.