

MMBD4448V

SWITCHING DIODE

VOLTAGE	80 Volt	POWER	150 mW
---------	---------	-------	--------

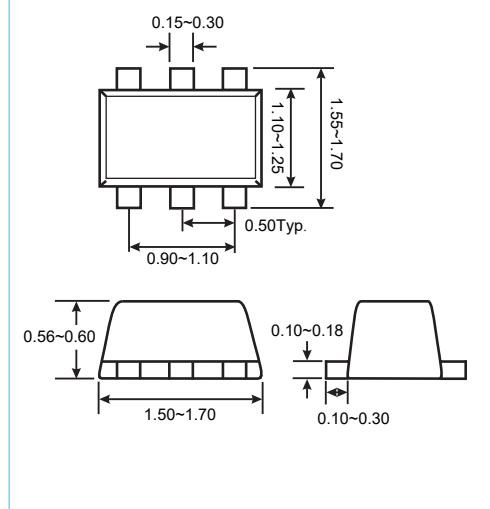
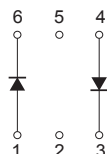
SOT-563 Unit:mm

FEATURES

- Fast Switching Speed
- For General Purpose Switching Applications
- High Conductance
- Lead free in compliance with EU RoHS
- Marking code:KAL

MECHANICAL DATA

- Case Material: Molded Plastic.
- UL Flammability Classification Rating 94V-0



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS($T_A = 25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Peak Reverse Voltage	V_{RRM}	80	V
Working Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	57	V
Forward Continuous Current	I_{FM}	500	mA
Average Rectified Output Current	I_O	250	mA
Non-Repetitive Peak Forward Surge Current @ $t=1\mu\text{s}$	I_{FSM}	4.0	A
Power Dissipation	P_d	150	mW
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	833	$^\circ\text{C/W}$
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55~+150	$^\circ\text{C}$

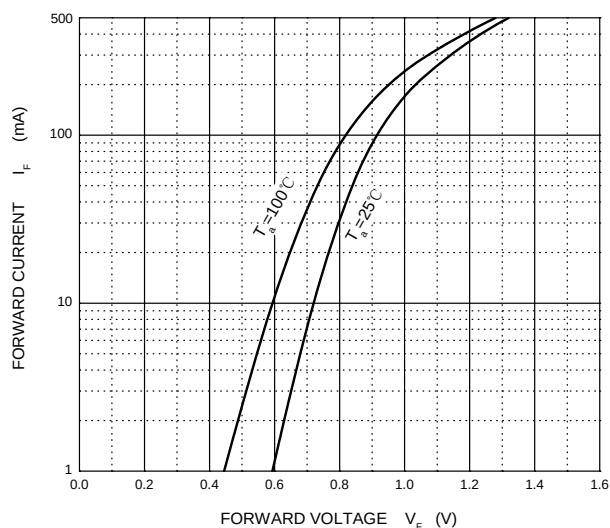
ELECTRICAL CHARACTERISTICS($T_A = 25^\circ\text{C}$ unless otherwise noted)

Characteristic	Symbol	Conditions	Min	Typ	Max	Unit
Reverse Breakdown Voltage	$V_{(BR)R}$	($I_R = 2.5\mu\text{A}$)	80			V
Reverse Leakage	I_R	($V_R = 70\text{ V}$) ($V_R = 20\text{ V}$)			0.1 25	μA nA
Forward Voltage	V_F	($I_F = 5.0\text{ mA}$) ($I_F = 10\text{ mA}$) ($I_F = 100\text{ mA}$) ($I_F = 150\text{ mA}$)	0.62		0.72 0.855 1.00 1.25	V
Total Capacitance	C_T	($V_R = 6\text{ V}$, $f = 1.0\text{ MHz}$)			3.5	pF
Reverse Recovery Time	t_{rr}	$I_F=10\text{mA}$, $I_R=10\text{mA}$, $I_{rr}=0.1I_R$, $R_L=100\ \Omega$			4.0	ns

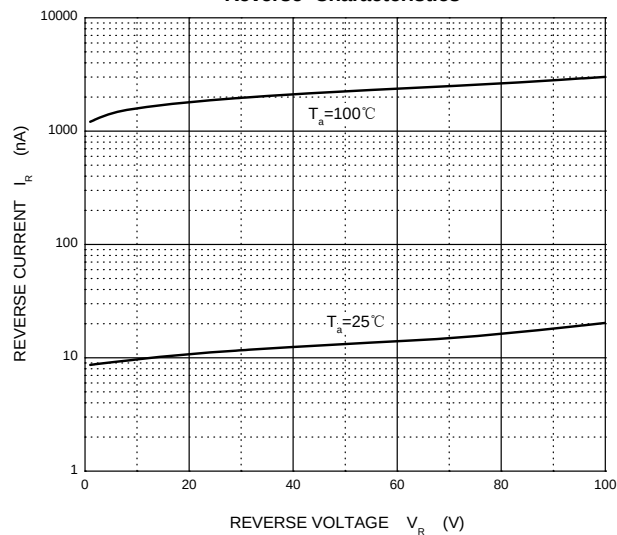
MMBD4448V

Typical Characteristics

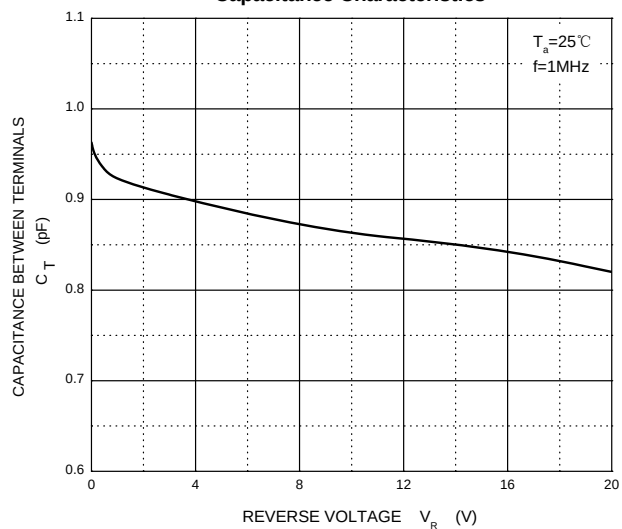
Forward Characteristics



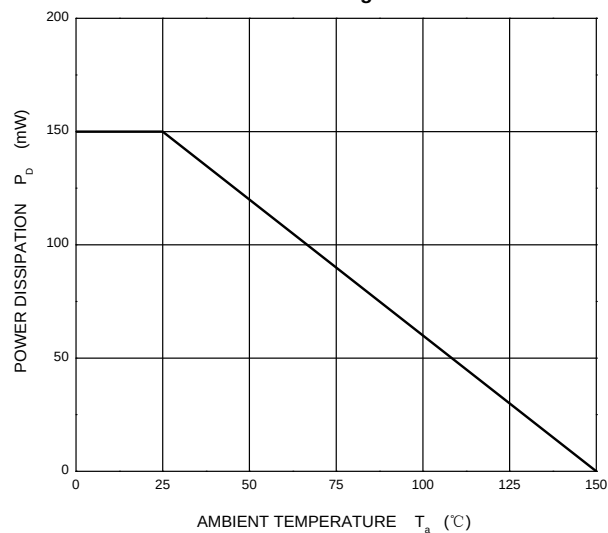
Reverse Characteristics



Capacitance Characteristics



Power Derating Curve

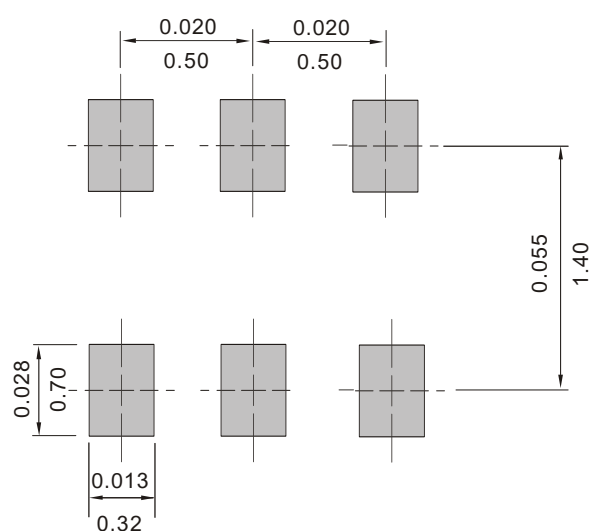


MMBD4448V

MOUNTING PAD LAYOUT

SOT-563

Unit:Inch(mm)



ORDER INFORMATION

- Packing information

Part Number	Case	Reel Size	QUANTITY
MMBD4448V	SOT-563	7 Inch	3000