



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

SOT-563 Plastic-Encapsulate Transistors

MMBD4448V SWITCHING DIODE

FEATURES

- Fast switching speed
- High conductance

MARKING: KAL

Maximum Ratings @T_A=25°C

Parameter	Symbol	Limits	Unit
Non-Repetitive Peak reverse voltage	V _{RM}	100	V
RMS Reverse Voltage	V _{R(RMS)}	57	V
Peak Repetitive Peak reverse voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	80	V
Forward Continuous Current	I _{FM}	500	mA
Average Rectified Output Current	I _O	250	mA
Peak forward surge current @=1.0μs @=1.0s	I _{FSM}	4.0 2.0	A
Power Dissipation	P _d	150	mW
Thermal Resistance Junction to Ambient	R _{θJA}	833	K/W
Storage temperature	T _{STG}	-65 to +150	°C

Electrical Ratings @T_A=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	V _{(BR)R}	80			V	I _R =2.5μA
Forward voltage	V _{F1}	0.62		0.72	V	I _F =5mA
	V _{F2}			0.855	V	I _F =10mA
	V _{F3}			1.0	V	I _F =100mA
	V _{F4}			1.25	V	I _F =150mA
Reverse current	I _{R1}			0.1	μA	V _R =70V
	I _{R2}			25	nA	V _R =20V
Capacitance between terminals	C _T			3.5	pF	V _R =6V, f=1MHz
Reverse Recovery Time	t _{rr}			4	ns	V _R =6V, I _F =5mA

SOT-563



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Typical Characteristics

MMBD4448V

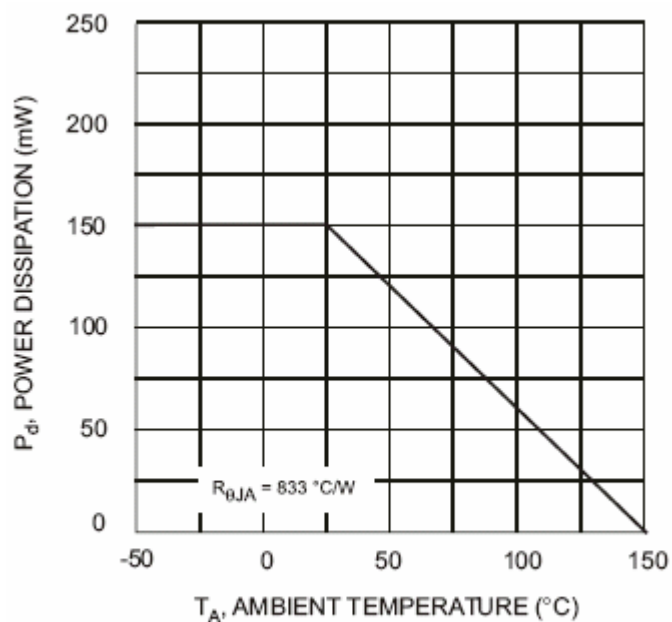


Fig. 1, Derating Curve - Total

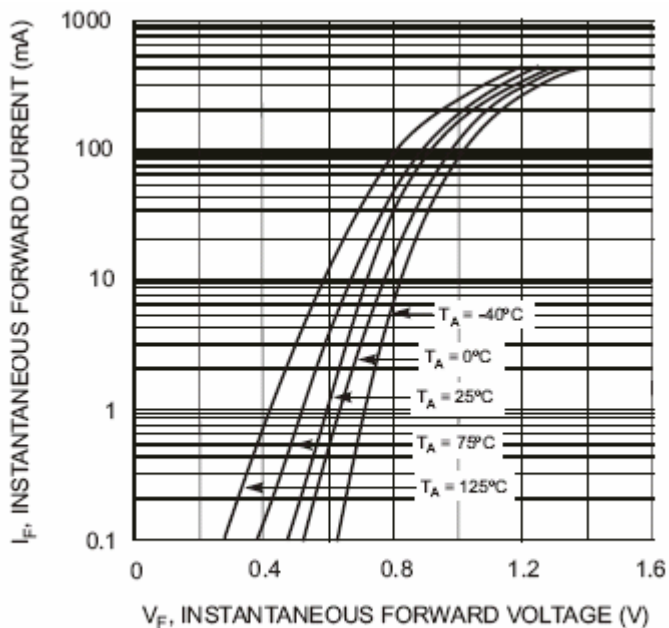


Fig. 2 Typical Forward Characteristics

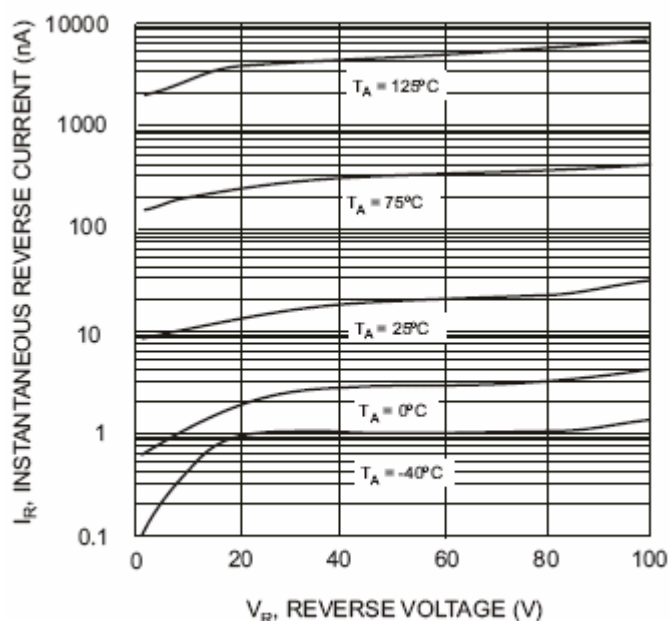


Fig. 3 Typical Reverse Characteristics

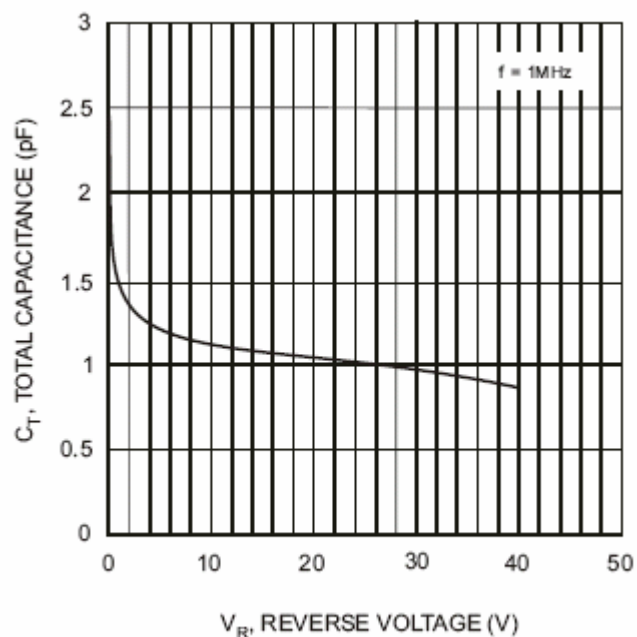


Fig. 4 Typical Capacitance vs. Reverse Voltage