## MSKSEMI















**ESD** 

TVS

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MOV

GDT

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# Broduct data sheet

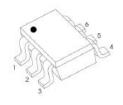












#### SOT-363

## **Switching Diode**

#### **FEATURES**

- Fast Switching Speed
- Ultra-Small Surface Mount Package
- For General Purpose Switching Applications
- High Conductance Power Dissipation

MMBD4448HAEW	MMBD4448HADW	MMBD4448HCDW	MMBD4448HSDW	MMBD4448HTW
6 5 4	6 5 4	6 5 4	6 5 4	6 5 4
MARKING:KA5	MARKING:KA6	MARKING:KA7	MARKING:KAB	MARKING: KAA
KA5	.KA6	KA7	# - + KAB = = = = + - #	KAA F F F

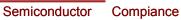
Solid dot = Pin1 indicate.

Solid dot = Green molding compound device, if none, the normal device.

#### Maximum Ratings and Electrical Characteristics. Single Diode @T₂=25 °C

Parameter	Symbol	Limit	Unit
Non-Repetitive Peak Reverse Voltage	$V_{RM}$	100	V
Peak Repetitive Peak Reverse Voltage	$V_{RRM}$		
Working Peak Reverse Voltage	$V_{RWM}$	80	V
DC Blocking Voltage	$V_{R}$		
RMS Reverse Voltage	$V_{R(RMS)}$	57	V
Forward Continuous Current	I <sub>FM</sub>	500	mA
Average Rectified Output Current	I <sub>O</sub>	250	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I <sub>FSM</sub>	2.0	А
Power Dissipation	Pd	200	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	625	°C/W
Storage Temperature	T <sub>STG</sub>	-55 ~+150	°C







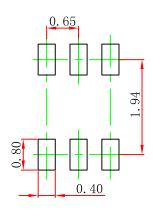
#### **ELECTRICAL CHARACTERISTICS**

#### Electrical Ratings @Ta=25℃

Parameter	Symbol	Min	Тур	Max	Unit	Conditions
Reverse Breakdown Voltage	V <sub>(BR)</sub>	80			V	IR=100μA
	V <sub>F1</sub>	0.62		0.72	V	I <sub>F</sub> =5mA
Forward Voltogo	V <sub>F2</sub>			0.855	V	I <sub>F</sub> =10mA
Forward Voltage	V <sub>F3</sub>			1.0	V	I <sub>F</sub> =100mA
	V <sub>F4</sub>			1.25	V	I <sub>F</sub> =150mA
Reverse Current	I <sub>R1</sub>			100	nA	V <sub>R</sub> =70V
Reverse Current	I <sub>R2</sub>			25	nA	V <sub>R</sub> =20V
Capacitance Between Terminals	C <sub>T</sub>			3.5	pF	V <sub>R</sub> =0V,f=1MHz
Reverse Recovery Time	t <sub>rr</sub>			4	ns	I <sub>F</sub> =I <sub>R</sub> =10mA
Transfer to the state of the st						Irr=0.1 $XI_R$ , $R_L$ =100 $\Omega$

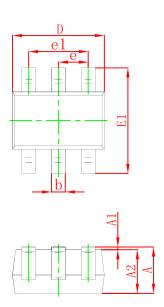


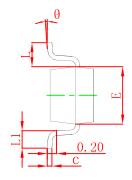




#### Note:

- 1.Controlling dimension:in millimeters. 2.General tolerance:± 0.05mm.
- 3. The pad layout is for reference purposes only.





Symbol	Dimensions	In Millimeters	Dimensions In Inches		
Syllibol	Min	Max	Min	Max	
Α	0.900	1.100	0.035	0.043	
A1	0.000	0.100	0.000	0.004	
A2	0.900	1.000	0.035	0.039	
b	0.150	0.350	0.006	0.014	
С	0.100	0.150	0.004	0.006	
D	2.000	2.200	0.079	0.087	
E	1.150	1.350	0.045	0.053	
E1	2.150	2.400	0.085	0.094	
е	0.650 TYP		0.026 TYP		
e1	1.200	1.400	0.047	0.055	
L	0.525 REF		0.021 REF		
L1	0.260	0.460	0.010	0.018	
θ	0°	8°	0°	8°	

#### **REEL SPECIFICATION**

P/N	PKG	QTY
MMBD4448	SOT-363	3000



Semiconductor

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