

Feature

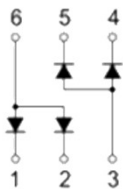
- SOT-363 Package
- Epoxy meets UL-94 V-0 flammability rating and halogen free
- Moisture Sensitivity Level 3
- High temperature soldering guaranteed 260°C/10 seconds at terminals

Mechanical Characteristics

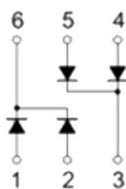
- Extreme fast switches
- Automotive



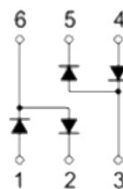
PMMBD4448HADW PMMBD4448HCDW PMMBD4448HSDW PMMBD4448HTW



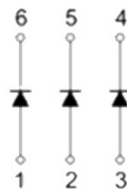
MARKING:KA6



MARKING:KA7



MARKING:KAB



MARKING:KAA



Absolute maximum rating@25°C

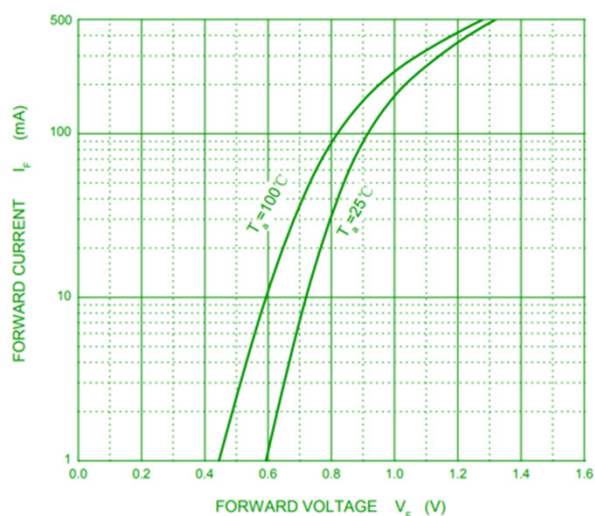
Parameter	Symbol	Value	Units
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Peak Reverse Voltage	V_{RRM}	80	V
Working Peak Reverse Voltage	V_{RWM}	80	V
DC Blocking Voltage	V_R	80	V
RMS Reverse Voltage	$V_{R(RMS)}$	57	V
Average Rectified Output Current	I_O	250	mA
Forward Continuous Current	I_{FM}	500	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I_{FSM}	2.0	A
Power Dissipation	P_D	200	mW
Junction and Storage Temperature Range	T_J, T_{STG}	-50~+150	°C
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	625	°C/W

Switching Diode

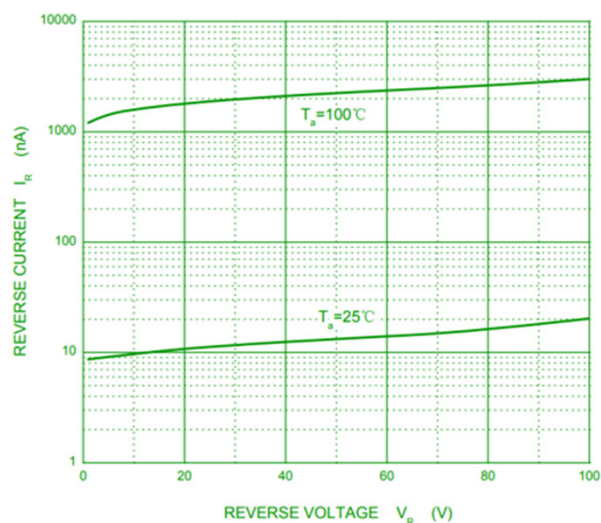
Electrical characteristics per line@25°C

Parameter	Symbol	Test Condition	Min	Max	Units
Reverse Breakdown Voltage	V_{BR}	$I_R=100\mu A$	80	-	V
Forward Voltage	V_F	$I_F=5mA$	0.62	0.72	V
		$I_F=10mA$	-	0.855	
		$I_F=50mA$	-	1.0	
		$I_F=150mA$	-	1.25	
Reverse Leakage Current	I_R	$V_R=70V$	-	100	nA
		$V_R=20V$	-	25	
Capacitance	C_j	$V_R=0V, f=1MHz$	-	3.5	pF
Reverse Recovery Time	t_{rr}	$I_F = 10mA, I_R = 10A, I_{rr} = 0.1mA, R_L = 100\Omega$	-	4.0	ns

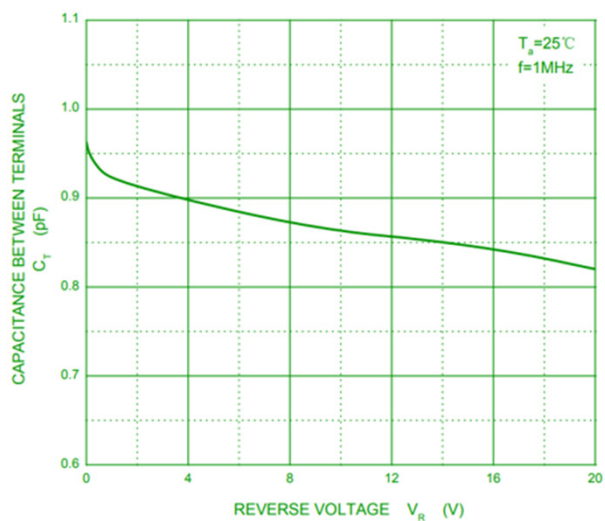
Typical Characteristics



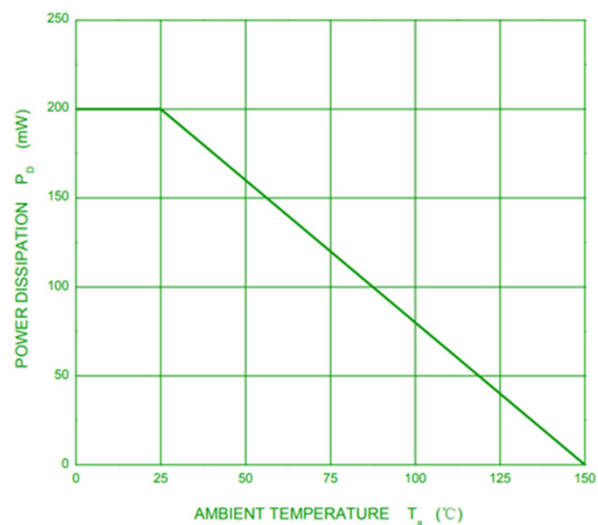
Forward Characteristics



Reverse Characteristics



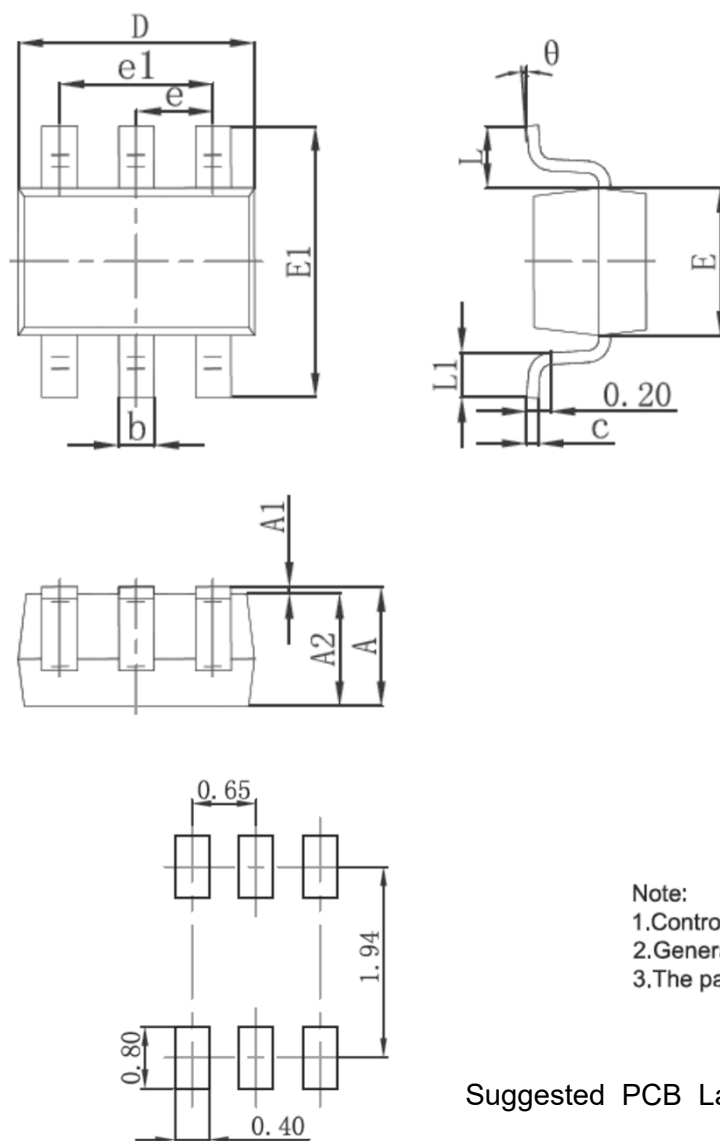
Capacitance Characteristics



Power Derating Curve

Switching Diode

Product dimension (SOT-363)



Dim	Millimeters	
	Min	Max
A	0.90	1.10
A1	0.00	0.10
A2	0.90	1.00
b	0.15	0.35
c	0.10	0.15
D	2.00	2.20
E	1.15	1.35
E1	2.15	2.4
e	0.65 Ref.	
e1	1.20	1.40
L	0.525 Ref.	
L1	0.26	0.46
∠	0°	8°

Note:

1. Controlling dimension: in millimeters.
2. General tolerance: $\pm 0.05\text{mm}$.
3. The pad layout is for reference purposes only.

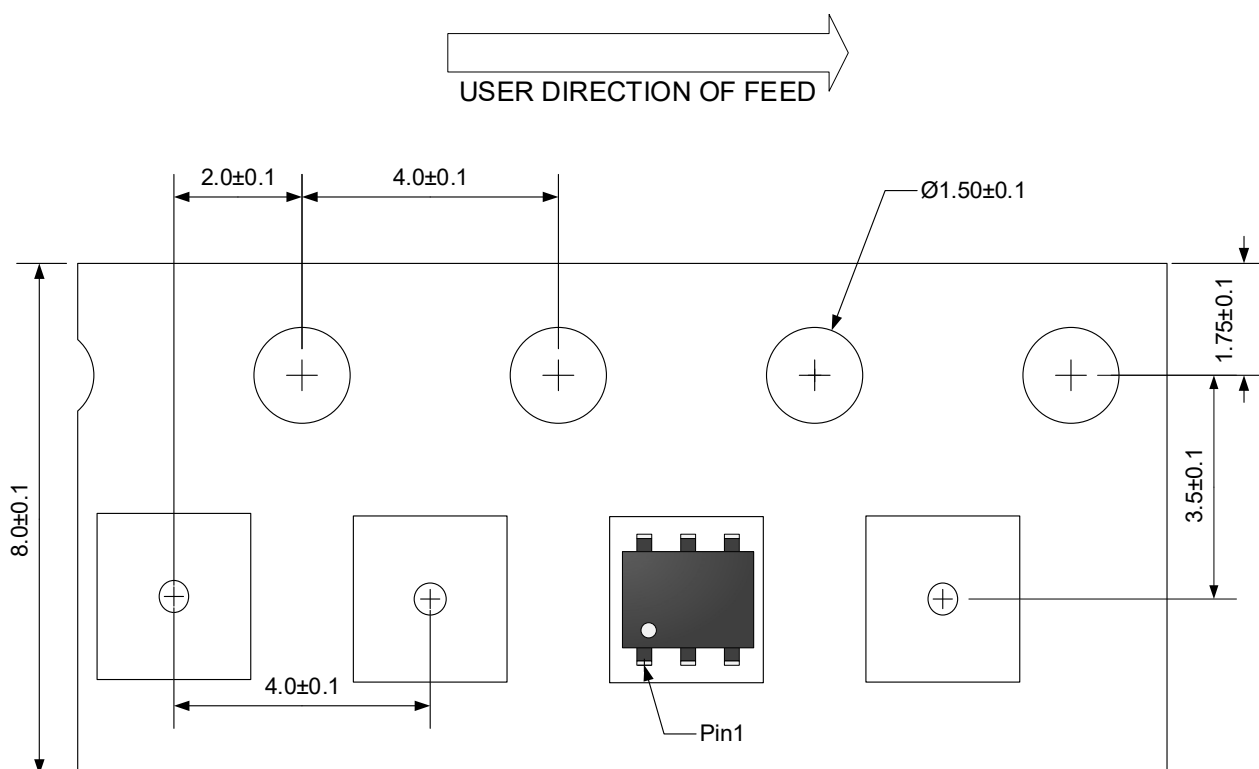
Suggested PCB Layout

Unit: mm

Ordering information

Package	Reel	Shipping
SOT-363	7"	3000 / Tape & Reel

Load with information



Unit:mm

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