

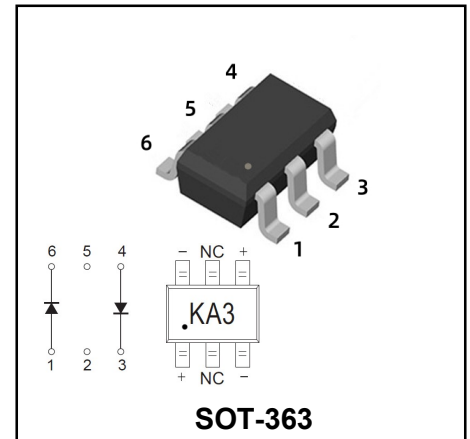
Plastic-Encapsulate Switching Diode

FEATURES

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

Mechanical Data

- ♦ Case: SOT-363
- ♦ Epoxy UL: 94V-0
- ♦ Mounting Position: Any



Marking Code

MMBD4448DW

KA3

Maximum Ratings & Thermal Characteristics

Ratings at 25°C ambient temperature unless otherwise specified

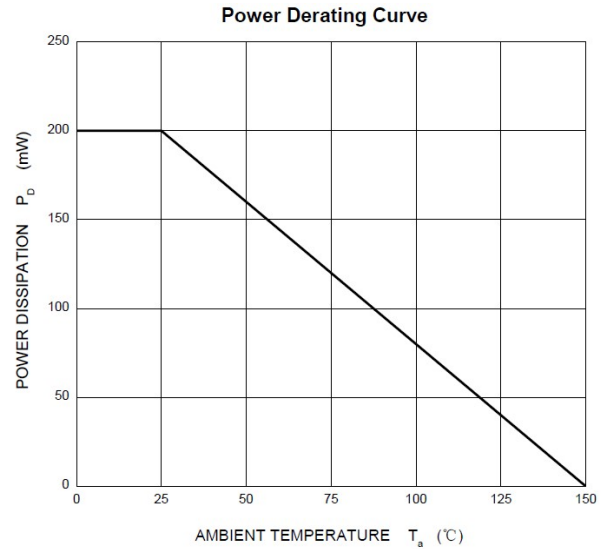
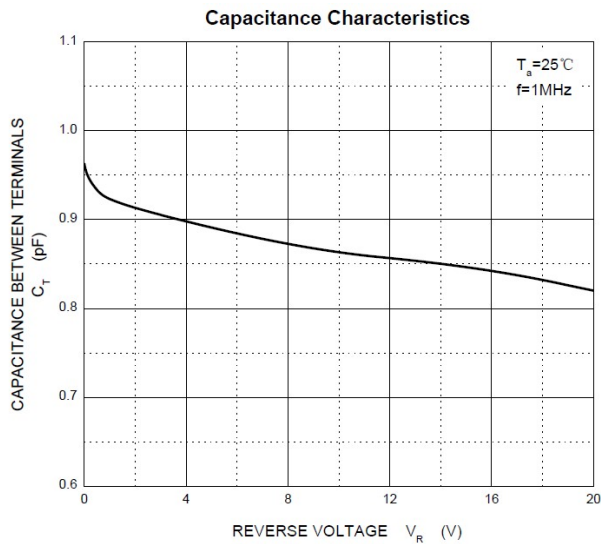
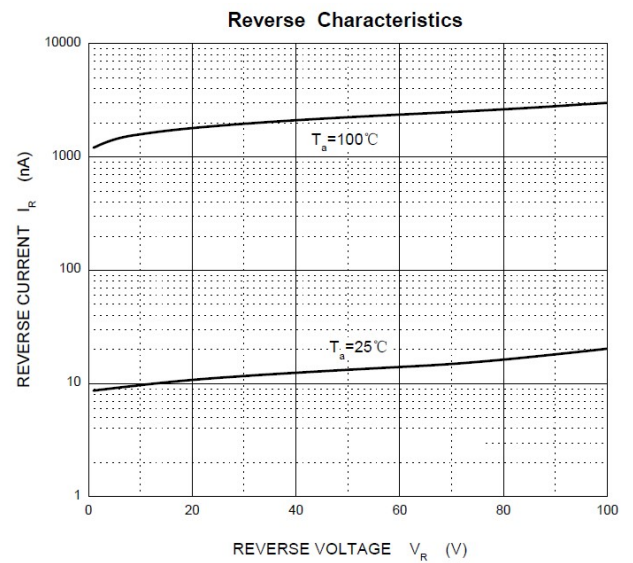
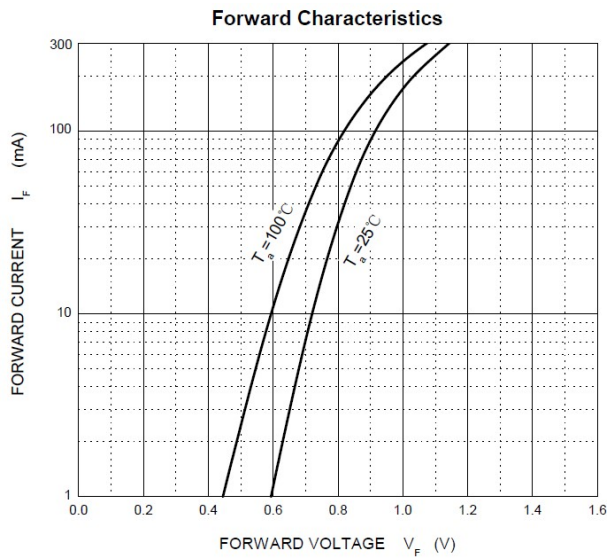
Parameter	Symbol	Value	Unit
Non-Repetitive Peak Reverse Voltage	V_{RM}	100	V
Peak Repetitive Peak Reverse Voltage Working	V_{RRM}	75	V
Peak Reverse Voltage	V_{RWM}		
DC Blocking Voltage	V_R		
RMS Reverse Voltage	$V_{R(RMS)}$	53	V
Forward Continuous Current	I_{FM}	500	mA
Average Rectified Output Current	I_o	250	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I_{FM}	2.0	A
Power Dissipation	P_D	200	mW
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	625	°C/W
Storage Temperature	T_{stg}	-55-+150	°C

Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified

Parameter	Test Condition	Symbols	Limits		Unit
			Min	Max	
Reverse Breakdown Voltage	$I_R=10\mu A$	$V(BR)_R$	75	---	V
Reverse Leakage Current	$V_R=20V$	I_R	---	25	nA
	$V_R=75$		---	2.5	uA
Forward Voltage	$I_F=5mA$	V_F	0.62	0.72	V
	$I_F=10mA$		---	0.855	
	$I_F=50mA$		---	1.0	
	$I_F=150mA$		---	1.25	
Reverse Recovery Time	$I_F=10mA, I_R=10mA$	t_{rr}	---	4	nS
	$R_L=100\Omega$				
	$I_{RR}=0.1mA$				
Capacitance	$V_R=0V, f=1MHZ$	CT	---	4	pF

Typical Characteristics



Ordering information

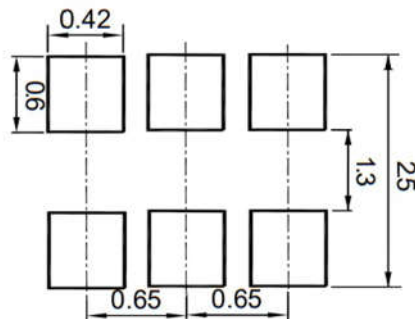
Package	Packing Description	Packing Quantity
SOT-363	Tape/Reel, 7" reel	3000PCS/Reel 120000PCS/Carton

Package Dimensions

SOT-363

Dim.	Millimeter(mm)		mil	
	Min.	Max.	Min.	Max.
A	0.8	1.1	32	43
A1	-	0.1	-	3.94
bp	0.20	0.30	7.87	11.81
c	0.10	0.25	3.94	9.84
D	1.8	2.2	70.87	86.61
E	1.15	1.35	45.28	53.15
e	1.3		51.18	
e1	0.65		25.6	
HE	2.0	2.2	78.74	86.6
Lp	0.15	0.45	5.90	17.71
Q	0.15	0.25	5.90	9.84
v	0.2		7.78	
w	0.2		7.78	
y	0.1		3.94	

The recommended mounting pad size



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