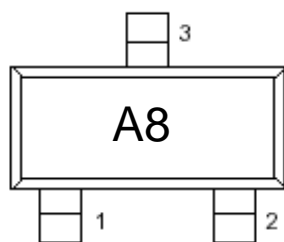
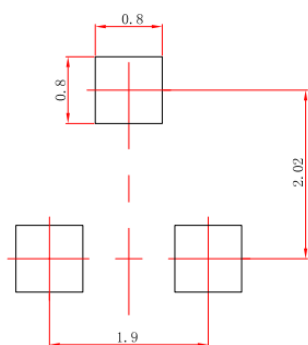


## Diode

Marking: A8



Top view

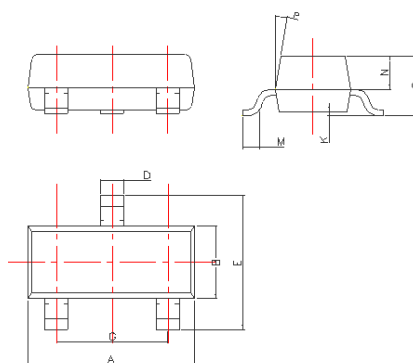


Suggested Layout

(±0.05mm)

SOT-23

Dimension



DIM	Millimeters
A	2.85~3.04
B	1.30±0.10
C	1.00±0.10
D	0.45±0.05
E	2.25~2.55
G	1.90±0.1
K	0.00-0.10
M	0.20 min
N	0.60±0.10
P	7±2°

### MAXIMUM RATINGS (Ta=25°C)

Characteristic	Symbol	Rating	Unit
Continuous Reverse Voltage	$V_R$	75	Vdc
Peak Reverse Voltage	$V_{RM}$	100	Vdc
Peak Forward Current	$I_F$	200	mAdc
Peak Forward Surge Current	$I_{FM(surge)}$	500	mAdc

### THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Total Device Dissipation FR-5 Board(1) TA=25°C	$P_D$	225	mW
Total Device Dissipation Alumina Substrate,(2) TA=25°C	$P_D$	300	mW
Junction and Storage Temperature	$T_J$ , $T_{stg}$	150 , -55 ~150	°C

- FR-5=1.0x0.75x0.062in, printed-circuit board.
- Alumina=0.4x0.3x0.024in, 99.5%alumina

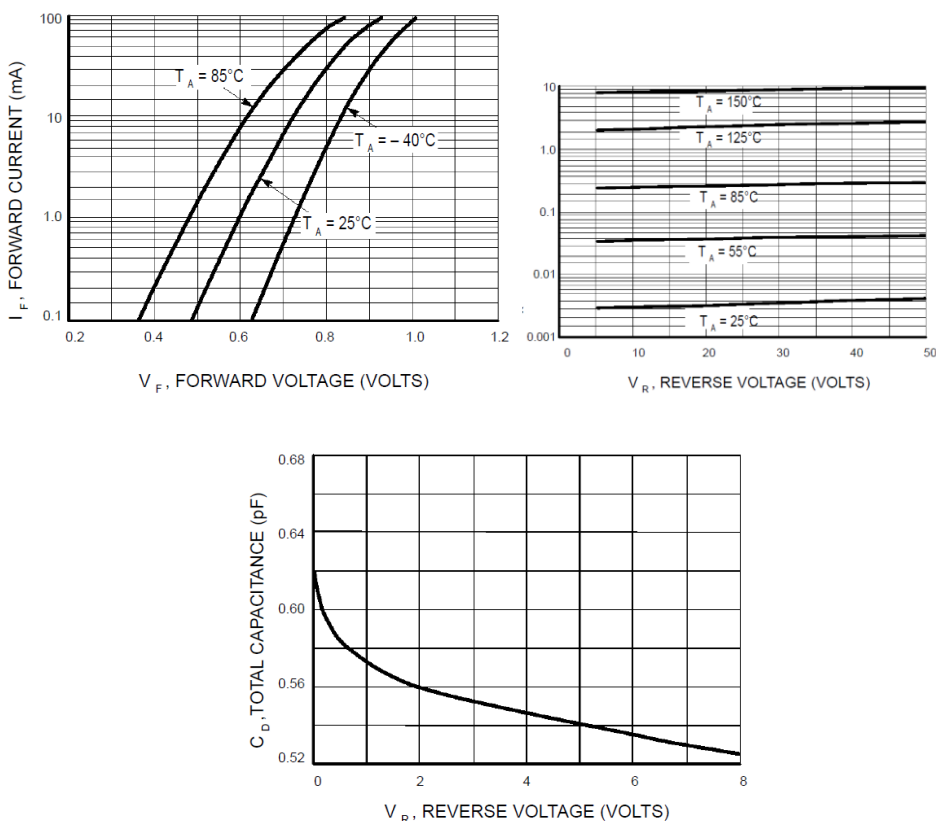
# Kingtronics®

# CDD4148-ME

## ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

Characteristic	Symbol	Test Condition	Min	Type	Max	Unit
Reverse Voltage Leakage Current	I <sub>R</sub>	V <sub>R</sub> =75Vdc	--	--	1.0	μA
		V <sub>R</sub> =75Vdc, T <sub>j</sub> =150°C	--	--	50	
		V <sub>R</sub> =25Vdc, T <sub>j</sub> =150°C	--	--	30	
Reverse Breakdown Voltage	V <sub>(BR)</sub>	I <sub>BR</sub> =100 μAdc	100	--	--	Vdc
Forward Voltage	V <sub>F</sub>	I <sub>F</sub> =1mA dc	--	--	715	mV
		I <sub>F</sub> =10mA dc	--	--	855	
		I <sub>F</sub> =50mA dc	--	--	1000	
		I <sub>F</sub> =150mA dc	--	--	1250	
Diode Capacitance	C <sub>D</sub>	V <sub>R</sub> =0, f=1.0MHz	--	--	2.0	pF
Forward Recovery Voltage	V <sub>FR</sub>	I <sub>F</sub> =10mA dc, t <sub>f</sub> =20ns	--	--	1.75	Vdc
Reverse Recovery Time	t <sub>rr</sub>	V <sub>R</sub> =6V, I <sub>F</sub> =10mA, RL=100Ω, irr=0.1IR	--	--	4.0	nS

## Typical Performance Characteristics



Note: Specifications are subject to change without notice.

**Kingtronics® International Company**

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