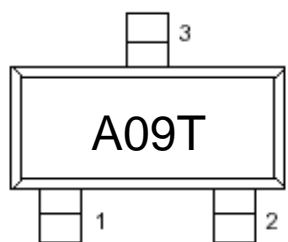


## MOSFET

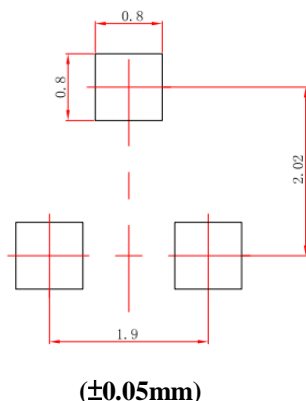
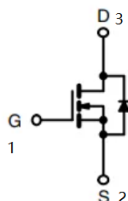
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Suggested Layout

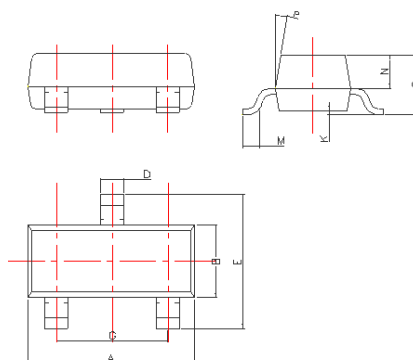
SOT-23



Top view



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
Drain-Source Voltage	VDSS	30	Vdc
Gate-Source Voltage	VGSS	±12	Vdc
Drain Current—Continuous	ID	5.8	Adc
Peak Drain Current	IDM <sup>1</sup>	20	Adc

### THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Total Device Dissipation TA=25°C	PD	400	mW
Thermal Resistance from Junction to Ambient	RθJA	313	°C/W
Junction and Storage Temperature	TJ, Tstg	150 , -55 to +150	°C

1. Repetitive Rating : Pulse width limited by maximum junction temperature

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

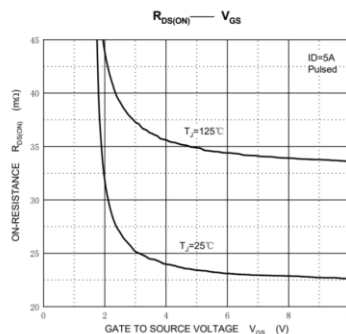
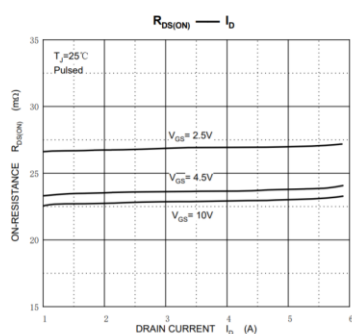
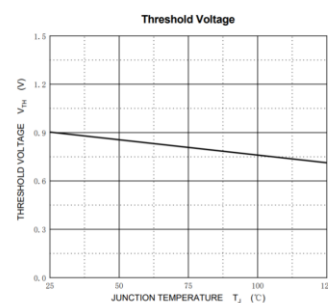
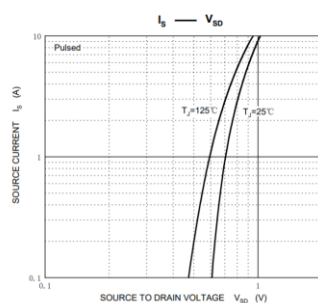
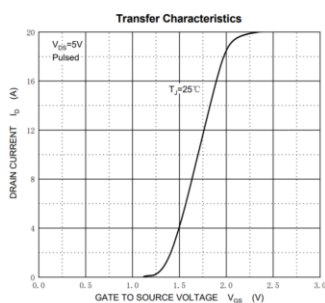
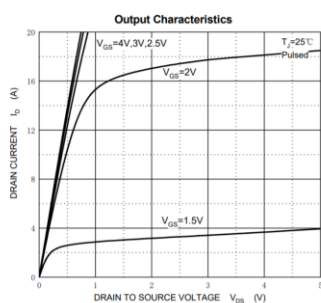
Characteristic	Symbol	Test Condition	Min	Type	Max	Unit
Drain-Source Breakdown Voltage	V(BR)DSS	VGS=0V, ID=250µA	30	—	—	V
Zero Gate Voltage Drain Current	IDSS	VDS=24V, VGS=0V	—	—	1.0	µA
Gate-Body Leakage Current, Forward	IGSS	VGS=±12V	—	—	±100	nA
Gate Threshold Voltage	VGS(th)	VDS=VGS, ID=250µA	0.70	0.95	1.2	V
Static Drain-Source On-State Resistance	RDS(on)	VGS=10V, ID=5.8A	—	22	35	mΩ
		VGS=4.5V, ID=5.0A	—	25	40	
		VGS=2.5V, ID=4.0A	—	37	52	

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# CDL3400A-ME

Forward Transconductance	$g_{fs}$	$V_{DS}=5V, I_D=5.0A$	8	—	—	S
Diode Forward On-Voltage	$V_{SD}$	$V_{GS}=0V, I_S=5.0A$	—	—	1.2	V
Turn-On Delay Time	$t_{d(on)}$	$V_{DD}=10V,$	—	4.4	—	ns
Turn-On Time	$t_r$	$V_{DS}=15V, I_D=5A, R_L = 2.7\Omega, R_{GEN} = 3\Omega$	-	28.2	-	
Turn-Off Delay Time	$t_{d(off)}$		-	16.2	-	
Turn-On Fall Time	$t_f$		-	26	-	
Input Capacitance	$C_{iss}$	$V_{DS} = 15V, V_{GS} = 0V, f = 1.0\text{ MHz}$	-	630	-	pF
Output Capacitance	$C_{oss}$		-	55	-	
Reverse Transfer Capacitance	$C_{rss}$		-	71	-	
Total Gate Charge	$Q_G$	$V_{DS} = 10V, I_D = 5A, V_{GS}=6V$	-	17.25	-	nC
Gate.to source charge	$Q_{GS}$		-	2.1	-	
Gate.to drain charge	$Q_{GD}$		-	2	-	

## Typical Performance Characteristics



Note: Specifications are subject to change without notice.

**Kingtronics® International Company**

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