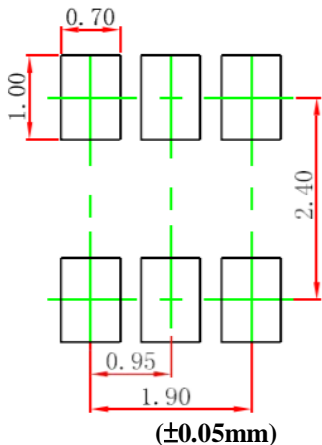


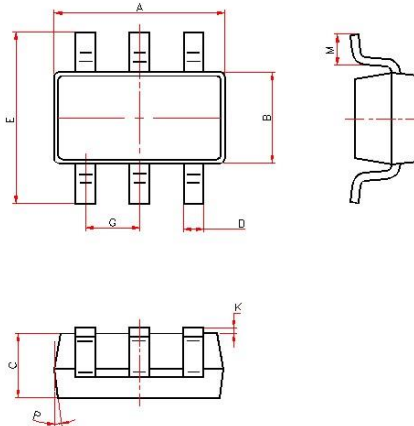
MOSFET

Suggested Layout



SOT-26

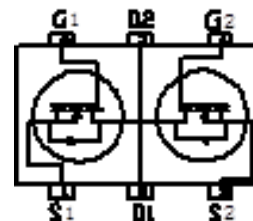
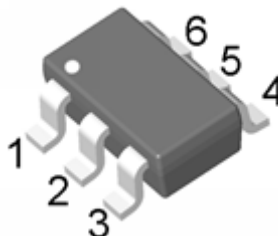
Dimension



DIM	Millimeters
A	2.82~3.02
B	1.60±0.10
C	1.10±0.05
D	0.40±0.10
E	2.65~2.95
G	0.95typ
K	0.00-0.10
M	0.20 MIN
P	9±2°

PIN ASSIGNMENT

PIN NAME	PIN NUMBER	FUNCTION
	SOT-26	
S1	1	Source1
D1/D2	2	Drain
S2	3	Source2
G2	4	Gate2
D2/D1	5	Drain
G1	6	Gate1



DEVICE MARKING

CDL8205-YE=8205

note : "CDL8205"---Type , "US" ---SOT-26 package , "E"---ROSH packaging.

MAXIMUM RATINGS (Ta=25°C)

Characteristic	Symbol	Rating	Unit
Drain-Source Voltage	VDSS	20	Vdc
Gate-Source Voltage	VGSS	±12	Vdc
Drain Current—Continuous	ID	6	Adc
Peak Drain Current	IDM	20	Adc

Kingtronics®**CDL8205-YE****THERMAL CHARACTERISTICS**

Characteristic	Symbol	Max	Unit
Total Device Dissipation FR-5 Board(1) TA=25°C	PD	225	mW
Total Device Dissipation Alumina Substrate,(2) TA=25°C	PD	300	mW
Junction and Storage Temperature	TJ, Tstg	150, -55 to +150	°C

- FR-5=1.0×0.75×0.062in, printed-circuit board.
- Alumina=0.4×0.3×0.024in, 99.5%alumina

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	20	-	-	V
Zero Gate Voltage Drain Current	IDSS	VDS=16V, VGS=0V	-	-	1.0	μA
Gate-Body Leakage Current,Forward	IGSS	VGS=±12V	-	-	±100	nA
Gate Threshold Voltage	VGS(th)	VDS= VGS ,ID =250μA	0.40	0.65	0.95	V
Static Drain-Source On-State Resistance	RDS(on)	VGS=4.5V, ID =4.5A	-	19	24	mΩ
		VGS=4V, ID =4.0A	-	21	26	
		VGS=2.5V, ID =3.0A	-	23	29	
Forward Transconductance	gfs	VDS = 15V ,ID=6.0A	-	25	-	S
Diode Forward On-Voltage	VSD	VGS=0V, IS =1.7A	-	-	1.2	V
Turn-On Delay Time	td(on)	VDD =-10V, ID =1.0A, VGS=4.5V	-	17.5	29.8	ns
Turn-On Time	tr		-	28.5	38.2	
Turn-Off Delay Time	td(off)		-	41.2	59.6	
Turn-On Fall Time	tf		-	10.4	26.3	
Input Capacitance	Ciss	VDS =-10V, VGS = 0V,f = 1.0 MHz	-	492	-	pF
Output Capacitance	Coss		-	54	-	
Reverse Transfer Capacitance	Crss		-	7	-	
Total Gate Charge	QG	VDS =10V, ID =6.0A,VGS =4.5V	-	7.49	8.50	nC
Gate.to source charge	QGS		-	2.48	2.96	
Gate.to drain charge	QGD		-	2.04	2.65	

Note: Specifications are subject to change without notice.

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