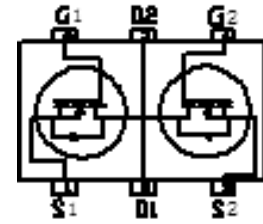
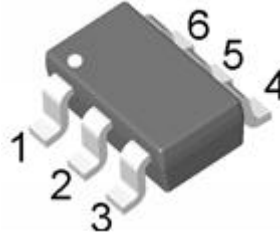


CDL8205-YE

MOSFET

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

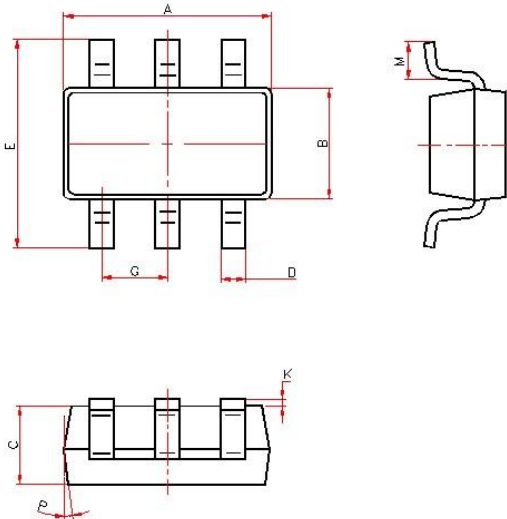


DEVICE MARKING

CDL8205-YE=8205

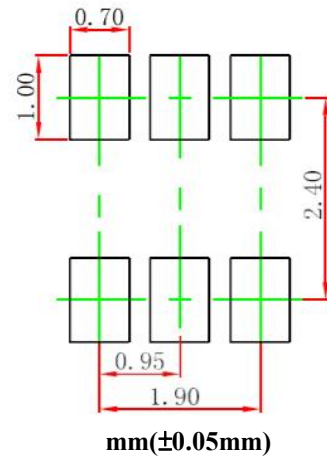
note : “CDL8205”---Type , “US” ---SOT-26 package , “E”---ROSH packaging.

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°

SOT-26 Suggested Layout



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

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

CDL8205-YE

MOSFET

ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

Characteristic	Symbol	Test Condition	Min	Type	Max	Unit
Drain-Source Breakdown Voltage	V _{(BR)DSS}	V _{GS} =0V, I _D =250μA	20	-	-	V
Zero Gate Voltage Drain Current	I _{DSS}	V _{DS} =16V, V _{GS} =0V	-	-	1.0	μA
Gate-Body Leakage Current, Forward	I _{GSS}	V _{GS} =±12V	-	-	±100	nA
Gate Threshold Voltage	V _{GS(th)}	V _{DS} =V _{GS} , I _D =250μA	0.40	0.65	0.95	V
Static Drain-Source On-State Resistance	R _{DS(on)}	V _{GS} =4.5V, I _D =4.5A	-	19	24	mΩ
		V _{GS} =4V, I _D =4.0A	-	21	26	
		V _{GS} =2.5V, I _D =3.0A	-	23	29	
Forward Transconductance	g _{fs}	V _{DS} =15V, I _D =6.0A	-	25	-	S
Diode Forward On-Voltage	V _{SD}	V _{GS} =0V, I _S =1.7A	-	-	1.2	V
Turn-On Delay Time	t _{d(on)}	V _{DD} = -10V, I _D = 1.0A, V _{GS} = 4.5V	-	17.5	29.8	ns
Turn-On Time	t _r		-	28.5	38.2	
Turn-Off Delay Time	t _{d(off)}		-	41.2	59.6	
Turn-On Fall Time	t _f		-	10.4	26.3	
Input Capacitance	C _{iss}	V _{DS} = -10V, V _{GS} = 0V, f = 1.0 MHz	-	492	-	pF
Output Capacitance	C _{oss}		-	54	-	
Reverse Transfer Capacitance	C _{rss}		-	7	-	
Total Gate Charge	Q _G	V _{DS} = 10V, I _D = 6.0A, V _{GS} = 4.5V		7.49	8.50	nC
Gate to source charge	Q _{GS}			2.48	2.96	
Gate to drain charge	Q _{GD}			2.04	2.65	

Note: Specifications are subject to change without notice. For more detail and update, please visit our website.