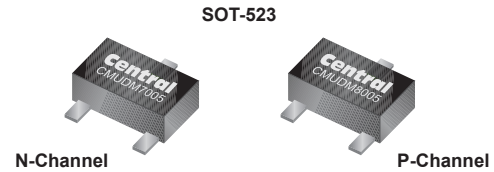


CMUDM7005 (N-Channel) CMUDM8005 (P-Channel)

20V, 650mA, Complementary MOSFETs
in the miniature SOT-523 package



Central Semiconductor's CMUDM7005 (N-Channel) and complementary CMUDM8005 (P-Channel) are single 20V, 650mA MOSFETs packaged in the miniature SOT-523 surface mount case. These devices are the ideal solution for design engineers seeking energy efficient MOSFETs in a very small package.

Features:

- ESD protection up to 2kV
- Low $r_{DS(ON)}$
- Low threshold voltage
- Logic level compatibility
- Low gate charge

Applications:

- High speed pulsed amplifiers
- Load/Power switches
- Power supply converter circuits
- Power management
- Motor drives

Benefits:

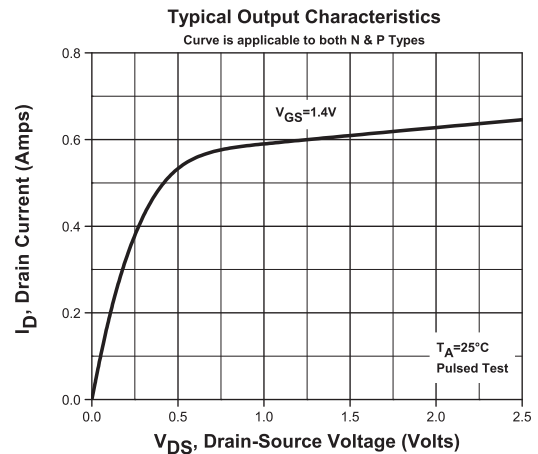
- Closely matched characteristics
- Energy efficiency
- Integrated transient protection



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Typical Electrical Characteristics



Samples and Literature



To order samples of this device visit:
www.centrasemi.com/info/CMUDM

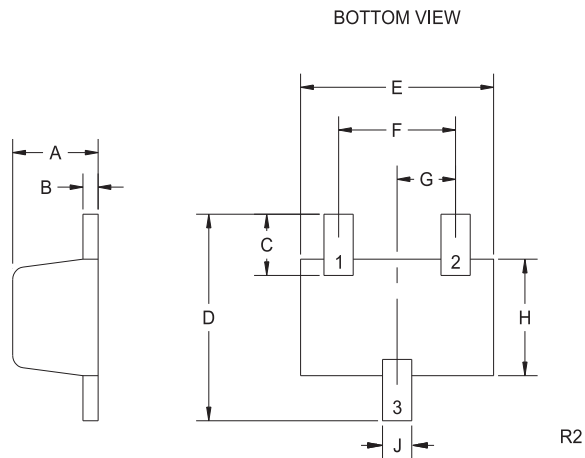
Electrical Characteristics: ($T_A = 25^\circ\text{C}$ unless otherwise noted)

	BV_{DSS} (V)		I_D (mA)		$V_{GS(th)}$ (V)		$r_{DS(ON)}$ (Ω)		@ V_{GS} (V)	@ I_D (mA)	Q_{gs} (nC)	C_{iss} (pF)	C_{rss} (pF)	P_D (mW)	T_J, T_{stg} ($^\circ\text{C}$)
	MIN	MAX	MIN	MAX	TYP	MAX	TYP	MAX							
N-Channel	20	650	0.5	1.1	0.14 0.2	0.23 0.275	4.5 2.5	600 500	0.17	100	18	300	-65 to +150		
P-Channel	20	650	0.5	1.0	0.25 0.37	0.36 0.5	4.5 2.5	350 300	0.24	100	25	300	-65 to +150		

CMUDM7005 (N-Channel) CMUDM8005 (P-Channel)

20V, 650mA, Complementary MOSFETs in the miniature SOT-523 package

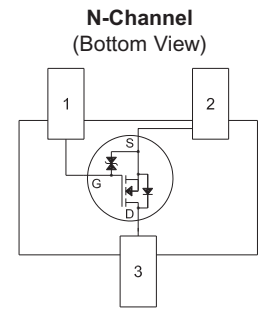
Mechanical Drawing



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.023	0.031	0.58	0.78
B	0.002	0.008	0.04	0.20
C	0.013	0.021	0.34	0.54
D	0.059	0.067	1.50	1.70
E	0.059	0.067	1.50	1.70
F	0.035	0.043	0.90	1.10
G	0.020		0.50	
H	0.031	0.039	0.78	0.98
J	0.010	0.014	0.25	0.35

SOT-523 (REV: R2)

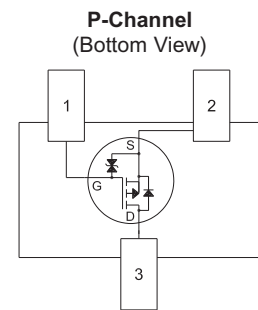
Pin Configuration



Lead Code:

- 1) Gate
- 2) Source
- 3) Drain

MARKING CODE: 5C7



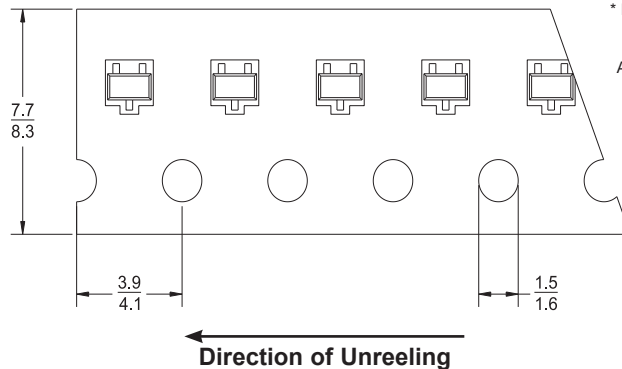
Lead Code:

- 1) Gate
- 2) Source
- 3) Drain

MARKING CODE: 5C8

Tape Dimensions and Orientation (Dimensions in mm)

Tape Width: 8mm



* Devices are taped in accordance with Electronic Industries Association Standard EIA-481-1-A

Packaging Base

7" Reel = 3,000 pcs. (add TR suffix to part number)

Reel Size	Reels per Box (Maximum)	Parts per Box (Maximum)	Box Dimensions		Shipping Weight (Max.)	
			INCH	CM	LB	KG
7"	9	27,000	9x9x5	23x23x13	3	2
	18	54,000	9x9x9	23x23x23	6	3
	40	120,000	21x9x9	53x23x23	13	6
	108	324,000	27x9x17	69x23x43	34	16

Sample devices available upon request. To order samples of this device visit: www.centrasemi.com/info/CMUDM



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PB CMUDM7005_8005 (R1)