

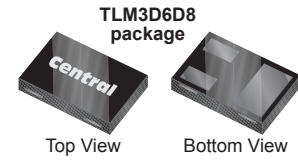
PRODUCT BRIEF



CTLDM3590 (20V, 160mA N-Channel)

CTLDM7590 (20V, 140mA P-Channel)

MOSFETs in the TLM3D6D8 package



Central Semiconductor's CTLDM3590 (N-Channel) and CTLDM7590 (P-Channel) are enhancement-mode MOSFETs designed for applications including high speed pulsed amplifiers and drivers. These MOSFETs have beneficially low $r_{DS(ON)}$, low threshold voltage, and very low gate charge characteristics.

Features:

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

Applications:

- Load/Power switches
- Boost/Buck converters
- Battery charging/Power management

Benefits:

- Low profile
- Space saving
- Energy efficiency

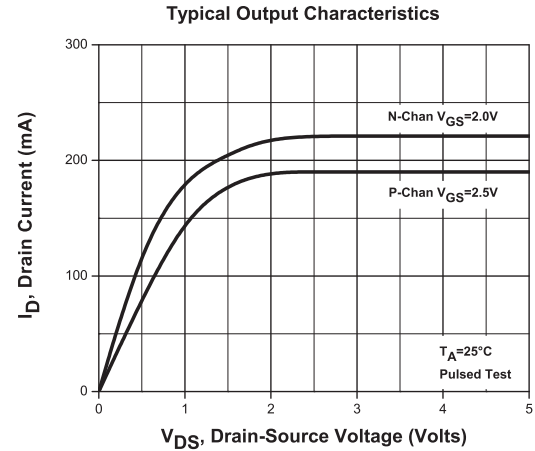
Literature:



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Typical Electrical Characteristics



Samples:



To request samples visit:
www.centrasemi.com/info/CTLDM3590
www.centrasemi.com/info/CTLDM7590

Weblink:

Use QR reader
for direct link to
product web page,
or use: www.centrasemi.com/info/CTLDM3590

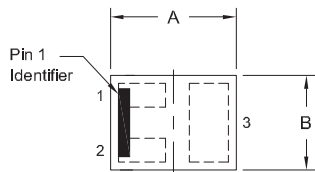


Type No.	Maximum Ratings ($T_A=25^\circ C$ unless otherwise noted)					Electrical Characteristics: ($T_A=25^\circ C$ unless otherwise noted)										
	V_{DS} (V)	I_D (mA)	P_D (mW)	T_J, T_{stg} ($^\circ C$)	θ_{JA} ($^\circ C/W$)	BV_{DSS} (V)	$V_{GS(th)}$ (V)		$r_{DS(ON)}$ (Ω)		$@ V_{GS}$ (V)	$@ I_D$ (mA)	Q_{gs} (nC)	C_{iss} (pF)	C_{rss} (pF)	
	MAX	MAX	MAX	MAX	MAX	MIN	MIN	MAX	TYP	MAX			TYP	TYP	TYP	
CTLDM3590 (N-Channel)	20	160	125	-65 to +150	1000	20	0.4	1.0	1.5	3.0	4.5	100	0.176	9.0	2.2	
									2.0	4.0						
									3.0	6.0						
									4.0	10						
CTLDM7590 (P-Channel)	20	140	125	-65 to +150	1000	20	0.4	1.0	4.0	5.0	4.5	100	0.17	10	4.0	
									5.5	7.0						
									8.0	10						
									8.0	10						
									11	17						

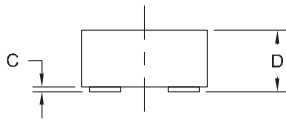
CTLDM3590 (20V, 160mA N-Channel)
CTLDM7590 (20V, 140mA P-Channel)

MOSFETs
in the
TLM3D6D8 package

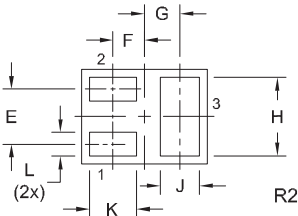
Mechanical Drawing - TLM3D6D8



TOP VIEW



SIDE VIEW



BOTTOM VIEW

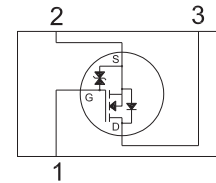
SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.029	0.034	0.75	0.85
B	0.021	0.026	0.55	0.65
C	0.000	0.002	0.00	0.05
D	0.012	0.016	0.31	0.40
E	0.014		0.35	
F	0.008		0.20	
G	0.009		0.225	
H	0.017	0.022	0.45	0.55
J	0.008	0.012	0.20	0.30
K	0.010	0.014	0.25	0.35
L	0.004	0.008	0.10	0.20

TLM3D6D8 (REV: R2)

MARKING CODES
CTLDM3590: 1
CTLDM7590: 2

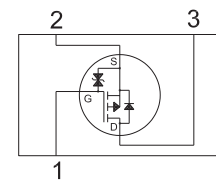
Pinouts

CTLDM3590
(Bottom View)



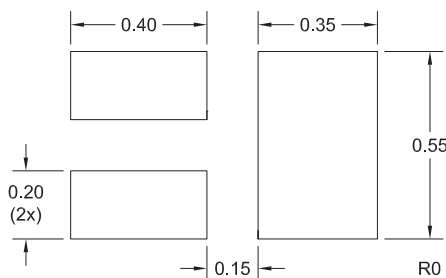
LEAD CODE:
 1) Gate
 2) Source
 3) Drain

CTLDM7590
(Bottom View)



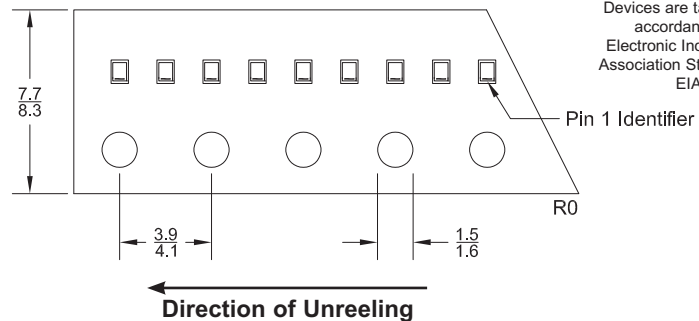
LEAD CODE:
 1) Gate
 2) Source
 3) Drain

Suggested Mounting Pads
 (Dimensions in mm)



Tape Dimensions and Orientation (Dimensions in mm)

Tape Width: 8mm



Devices are taped in accordance with Electronic Industries Association Standard EIA-481-D

Packaging Base / Ordering Information

Reel Size	Quantity	Central Item No.
7"	10,000	CTLDM3590 TR
		CTLDM7590 TR

Reel Packing Information

Reel Size	Reels per Box (Maximum)	Parts per Box (Maximum)	Box Dimensions		Shipping Weight (Max.)	
			INCH	CM	LB	KG
7"	9	90,000	9x9x5	23x23x13	3	2
	18	180,000	9x9x9	23x23x23	6	3
	40	400,000	21x9x9	53x23x23	13	6
	108	1,080,000	27x9x17	69x23x43	34	34

Sample devices available upon request. To order samples visit: www.centrasemi.com/info/CTLDM3590



For further information contact:
 Sales at Central Semiconductor Corp.
 (631) 435-1110 or visit:
www.centrasemi.com