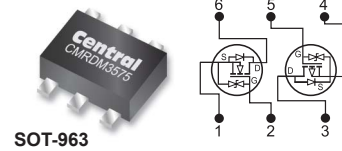


## CMRDM3575

### N-Channel and P-Channel Complementary MOSFETs in the SOT-963



The new dual complementary CMRDM3575 consists of a 20V, 160mA N-Channel MOSFET and a 20V, 140mA P-Channel MOSFET. Packaged in the ultra miniature SOT-963 surface mount case, this new device is an integrated solution designed for circuits requiring N-Channel and P-Channel MOSFETs with comparable electrical characteristics. The CMRDM3575 is ideal for power management applications, such as synchronous load rectification or buck conversion.

#### Features:

- Low threshold voltage
- Integrated ESD protection
- Space saving SOT-963 package
- Low profile package

#### Applications:

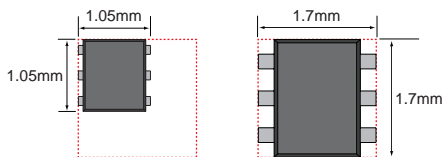
- Load power switches
- Power supply converter circuits
- Battery charging circuits

#### Benefits:

- Uses less board space
- Facilitates assembly cost reduction
- Energy efficient

#### Package Comparison:

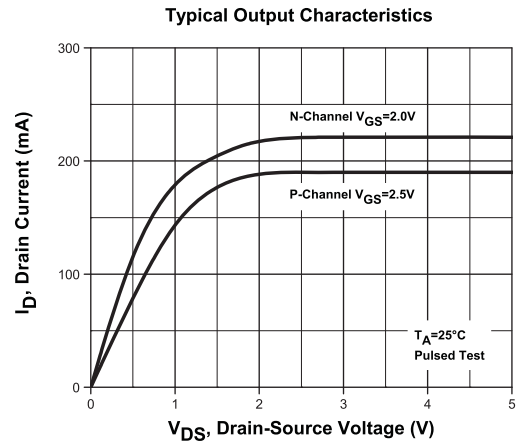
The SOT-963 utilizes **61%** less board space than SOT-563



The SOT-963 has **16%** lower profile than SOT-563



#### Typical Electrical Characteristic



#### Samples and Literature



To order samples of this device visit:  
[www.centalsemi.com/info/CMRDM3575](http://www.centalsemi.com/info/CMRDM3575)

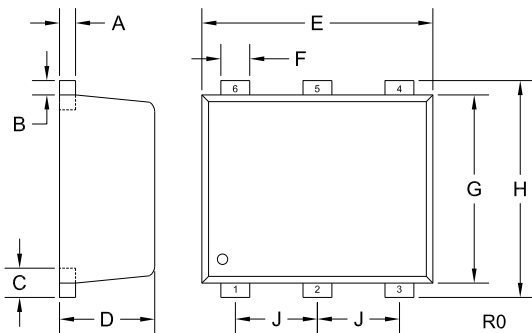


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 Visit: [web.centalsemi.com/search/sample.php](http://web.centalsemi.com/search/sample.php)

	Electrical Characteristics									Thermal Characteristics			
	BV <sub>DSS</sub> (V)	I <sub>D</sub> (mA)	V <sub>GS(th)</sub> (V)		r <sub>DS(ON)</sub> (Ω)		@ V <sub>GS</sub> (V)	@ I <sub>D</sub> (mA)	C <sub>iss</sub> (pF)	C <sub>rss</sub> (pF)	PD (mW)	T <sub>J</sub> , T <sub>stg</sub> (°C)	θ <sub>JA</sub> (°C/W)
	MIN	MAX	MIN	MAX	TYP	MAX			TYP	TYP		MAX	MAX
N-Channel	20	160	0.4	1.0	1.5	3.0	4.5	100	9.0	2.2	125	-65 to +150	1000
					2.0	4.0	2.5	50					
					3.0	6.0	1.8	20					
					4.0	10	1.5	10					
P-Channel	20	140	0.4	1.0	4.0	5.0	4.5	100	12	1.0	125	-65 to +150	1000
					5.5	7.0	2.5	50					
					8.0	10	1.8	20					
					11	17	1.5	10					

Also available: CMRDM3590, Dual, N-Channel MOSFETs in the SOT-963 package.  
 CMRDM7590, Dual, P-Channel MOSFETs in the SOT-963 package.

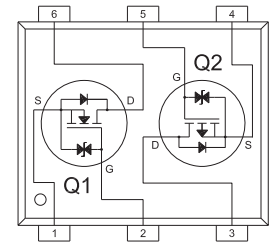
## Mechanical Drawing - SOT-963



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.002	0.006	0.050	0.150
B	0.002	0.006	0.050	0.150
C	0.005	0.007	0.125	0.175
D	0.016	0.020	0.400	0.500
E	0.037	0.041	0.950	1.050
F	0.004	0.008	0.100	0.200
G	0.030	0.033	0.750	0.850
H	0.037	0.041	0.950	1.050
J	0.014		0.350	

SOT-963 (REV: R0)

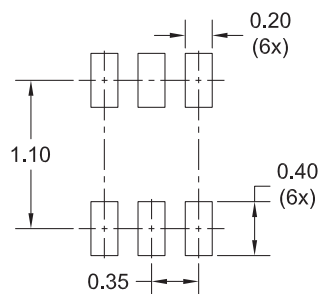
## Lead Code



- 1) SOURCE Q1
- 2) GATE Q1
- 3) DRAIN Q2
- 4) SOURCE Q2
- 5) GATE Q2
- 6) DRAIN Q1

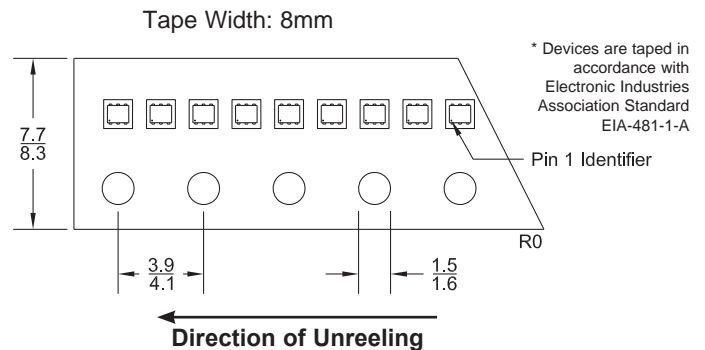
MARKING CODE: CT

## Mounting Pad Geometry (Dimensions in mm)



R0

## Tape Dimensions and Orientation (Dimensions in mm)



## Packaging Base

7" Reel = 8,000 pcs. (add TR suffix to part number)

## Reel Packing Information

Reel Size	Reels per Box (Maximum)	Parts per Box (Maximum)	Box Dimensions		Shipping Weight (Max.)	
			INCH	CM	LB	KG
7"	3	24,000	8x7x2	20x18x5	1	1
	9	72,000	9x9x5	23x23x13	3	2
	18	144,000	9x9x9	23x23x23	6	3
	40	320,000	21x9x9	53x23x23	13	6
	108	864,000	27x9x17	69x23x43	34	16

Sample devices available upon request. To order samples of this device visit: [www.centalsemi.com/info/CMRDM3575](http://www.centalsemi.com/info/CMRDM3575)



**Innovative Discrete Semiconductors**

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Sales at Central Semiconductor Corp.  
(631) 435-1110 or visit our website at:  
[www.centalsemi.com](http://www.centalsemi.com)