

CMPDM7003**SURFACE MOUNT
N-CHANNEL
ENHANCEMENT-MODE
SILICON MOSFET****SOT-23 CASE**www.centrasemi.com**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMPDM7003 is an Enhancement-mode N-Channel Field Effect Transistor, manufactured by the N-Channel DMOS Process, designed for high speed pulsed amplifier and driver applications. This MOSFET offers low $r_{DS(ON)}$ and ESD protection up to 2kV.

MARKING CODE: C7003**FEATURES:**

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

APPLICATIONS:

- Load/Power switches
- Power supply converter circuits
- Battery powered portable equipment

MAXIMUM RATINGS: ($T_A=25^\circ\text{C}$)

Drain-Source Voltage
Drain-Gate Voltage
Gate-Source Voltage
Continuous Drain Current
Maximum Pulsed Drain Current
Power Dissipation
Operating and Storage Junction Temperature
Thermal Resistance

SYMBOL

V_{DS}	50
V_{DG}	50
V_{GS}	12
I_D	280
I_{DM}	1.5
P_D	350
T_J, T_{stg}	-65 to +150
Θ_{JA}	357

UNITS

V
V
V
mA
A
mW
$^\circ\text{C}$
$^\circ\text{C/W}$

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

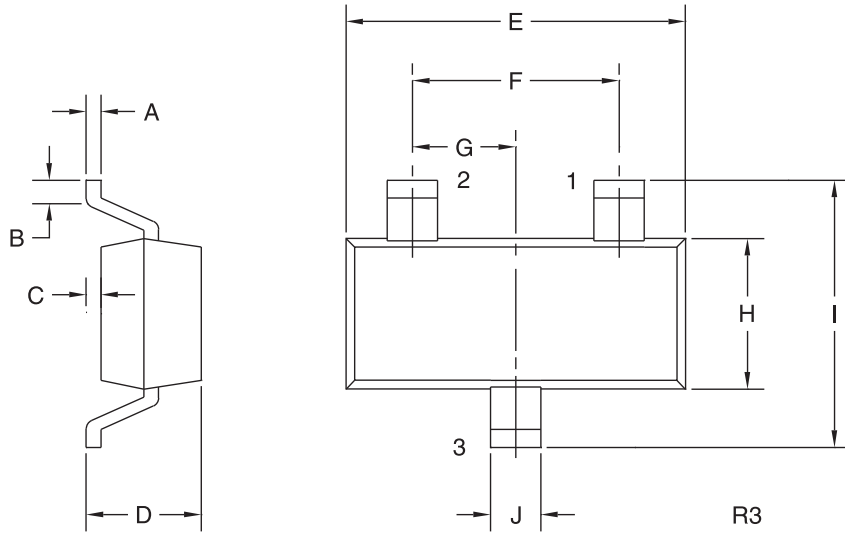
SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_{GSSF}, I_{GSSR}	$V_{GS}=5.0\text{V}$			100	nA
I_{GSSF}, I_{GSSR}	$V_{GS}=10\text{V}$			2.0	μA
I_{GSSF}, I_{GSSR}	$V_{GS}=12\text{V}$			2.0	μA
I_{DSS}	$V_{DS}=50\text{V}, V_{GS}=0$			50	nA
BV_{DSS}	$V_{GS}=0, I_D=10\mu\text{A}$	50			V
$V_{GS(th)}$	$V_{DS}=V_{GS}, I_D=250\mu\text{A}$	0.49		1.0	V
V_{SD}	$V_{GS}=0, I_S=115\text{mA}$			1.4	V
$r_{DS(ON)}$	$V_{GS}=1.8\text{V}, I_D=50\text{mA}$		1.6	3.0	Ω
$r_{DS(ON)}$	$V_{GS}=2.5\text{V}, I_D=50\text{mA}$		1.3	2.5	Ω
$r_{DS(ON)}$	$V_{GS}=5.0\text{V}, I_D=50\text{mA}$		1.1	2.0	Ω
gFS	$V_{DS}=10\text{V}, I_D=200\text{mA}$	200			mS
C_{rss}	$V_{DS}=25\text{V}, V_{GS}=0, f=1.0\text{MHz}$			5.0	pF
C_{iss}	$V_{DS}=25\text{V}, V_{GS}=0, f=1.0\text{MHz}$			50	pF
C_{oss}	$V_{DS}=25\text{V}, V_{GS}=0, f=1.0\text{MHz}$			25	pF

R1 (27-January 2010)

CMPDM7003
SURFACE MOUNT
N-CHANNEL
ENHANCEMENT-MODE
SILICON MOSFET



SOT-23 CASE - MECHANICAL OUTLINE



LEAD CODE:

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

MARKING CODE: C7003

DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.003	0.007	0.08	0.18
B	0.006	-	0.15	-
C	-	0.005	-	0.13
D	0.035	0.043	0.89	1.09
E	0.110	0.120	2.80	3.05
F	0.075		1.90	
G	0.037		0.95	
H	0.047	0.055	1.19	1.40
I	0.083	0.098	2.10	2.49
J	0.014	0.020	0.35	0.50

SOT-23 (REV: R3)

R1 (27-January 2010)

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for [MOSFET](#) category:

Click to view products by [Central Semiconductor](#) manufacturer:

Other Similar products are found below :

[614233C](#) [648584F](#) [IRFD120](#) [JANTX2N5237](#) [2N7000](#) [FCA20N60_F109](#) [FDZ595PZ](#) [2SK2545\(Q,T\)](#) [405094E](#) [423220D](#)
[TPCC8103,L1Q\(CM](#) [MIC4420CM-TR](#) [VN1206L](#) [614234A](#) [715780A](#) [NTNS3166NZT5G](#) [SSM6J414TU,LF\(T](#) [751625C](#)
[IPS70R2K0CEAKMA1](#) [BUK954R8-60E](#) [DMN3404LQ-7](#) [NTE6400](#) [SQJ402EP-T1-GE3](#) [2SK2614\(TE16L1,Q\)](#) [2N7002KW-FAI](#)
[DMN1017UCP3-7](#) [EFC2J004NUZTDG](#) [ECH8691-TL-W](#) [FCAB21350L1](#) [P85W28HP2F-7071](#) [DMN1053UCP4-7](#) [NTE221](#) [NTE2384](#)
[NTE2903](#) [NTE2941](#) [NTE2945](#) [NTE2946](#) [NTE2960](#) [NTE2967](#) [NTE2969](#) [NTE2976](#) [NTE455](#) [NTE6400A](#) [NTE2910](#) [NTE2916](#) [NTE2956](#)
[NTE2911](#) [US6M2GTR](#) [TK10A80W,S4X\(S](#) [SSM6P69NU,LF](#)