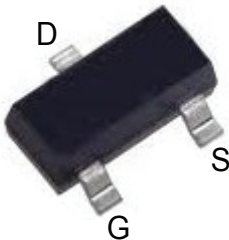
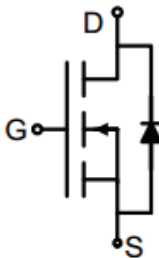


**Chimicron****CM3400****N-Channel Enhancement Mode Power MOSFET**

30VDS/ ±12VGS/5.8A(ID)	Part No	CM3400	
Description The NCE3400 uses advanced trench technology to provide excellent RDS(ON), low gate charge and operation with gate voltages as low as 2.5V. This device is suitable for use as a Battery protection or in other Switching application. Application ●PWM applications ●Load switch ●Power management	Product Summary VDS=30V ID= 5.8A RDS(ON)< 59mΩ@ VGS=2.5V RDS(ON)< 45mΩ@ VGS=4.5V RDS(ON)< 41mΩ@ VGS=10V		
 SOT-23 Package			
Absolute Maximum Ratings (TA=25℃unless otherwise noted)			
Parameter	Symbol	Maximum	Units
Drain-Source Voltage	VDS	30	V
Gate-Source Voltage	VGS	±12	V
Continuous Current Drain	ID	5.8	A
Pulsed Drain Current(Note 1)	IDM	30	A
Power Description	PD	1.4	W
Operating Junction and Storage Temperature Range	Tj, TSTG	-55℃ to 150°.	℃

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Electrical Characteristics (TA=25°C unless otherwise noted)

Symbol	Parameter	Test Conditions	Min	Type	Max	Units
Off Characteristics						
BVDSS	Drain-Source Breakdown Voltage	VGS = 0V, ID=-250μA	30	33	-	V
IDSS	Drain-to-Source Leakage Current	VDS=-24V,VGS=0V			1	μA
IGSS	Gate-Body Leakage Current	VGS=±12V,VDS=0V	-	-	±100	nA
On Characteristics (Note 3)						
Gate Threshold Voltage	VGS(th)	VDS=VGS,ID=250μA	0.7	0.9	1.4	V
Drain-Source On-State Resistance	RDS(ON)	VGS=2.5V, ID=4A	-	45	59	mΩ
		VGS=4.5V, ID=2.9A	-	31	45	
		VGS=10V, ID=2.9A		28	41	
Forward Trans conductance	gFS	VDS=5V,ID=2.9A	-	10	-	S
Dynamic Characteristics (Note4)						
Input Capacitance	Ciss	VDS=15V,VGS=0V, F=1.0MHz	-	623	-	PF
Output Capacitance	Coss		-	99	-	PF
Reverse Transfer Capacitance	Crss		-	77	-	PF
Switching Characteristics (Note 4)						
Turn-on Delay Time	td(on)	VDD=15V,ID=2.9A	-	3.3	-	nS
Turn-on Rise Time	tr		-	4.8	-	nS
Turn-Off Delay Time	td(off)	VGS=10V,RGEN=3Ω	-	26	-	nS
Turn-Off Fall Time	td(off)		-	4	-	nS
Total Gate Charge	Qg	VDS=15V,ID=5.8A, VGS=4.5V	-	9.5	-	nC
Gate-Source Charge	Qgs		-	1.5	-	nC
Gate-Drain Charge	Qgd		-	3	-	nC
Drain-Source Diode Characteristics						
Diode Forward Current (Note 2)			-	-	2.9	A
Diode Forward Voltage (Note 3)	VSD	VGS=0V,IS=2.9A	-	0.75	-1.2	v

Notes:

1. Repetitive Rating: Pulse width limited by maximum junction temperature.
2. Surface Mounted on FR4 Board, t ≤10 sec.
3. Pulse Test: Pulse Width ≤300μs, Duty Cycle ≤2%.
4. Guaranteed by design, not subject to production



Typical Electrical and Thermal Characteristics

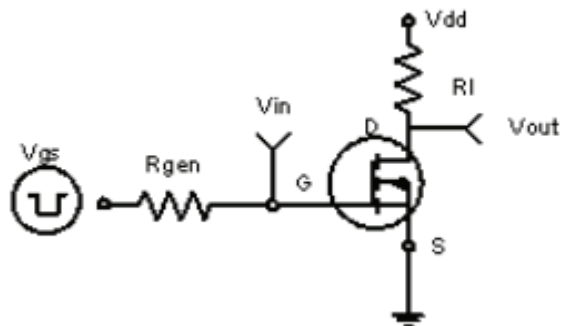


Figure 1: Switching Test Circuit

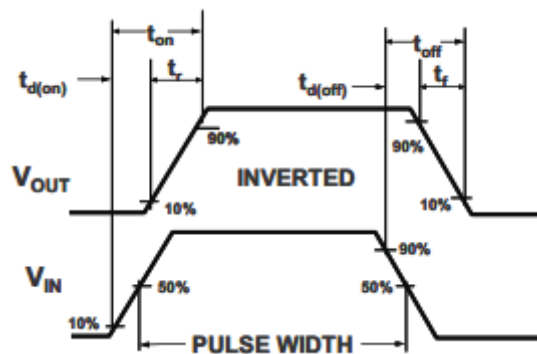


Figure 2: Switching Waveforms