



**VERY LOW RON  
SWITCHING  
SILICON EPITAXIAL JUNCTION  
N-CHANNEL FIELD EFFECT TRANSISTOR**

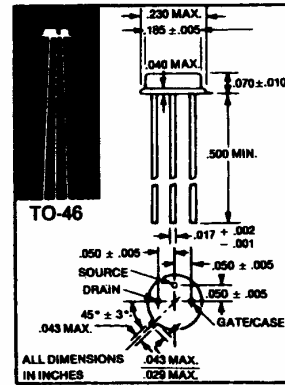
**CM800**

GEOMETRY 446

- LOW  $R_{DS}$  – 30 Ohms MAXIMUM
- LOW  $V_p$  – 7 Volts MAXIMUM
- HIGH  $I_{DSS}$  – 30 mA MINIMUM

**ELECTRICAL DATA ABSOLUTE MAXIMUM RATINGS**

PARAMETER	SYMBOL	CM800	UNITS
Drain to Gate Voltage	$BV_{DGO}$	30	Volts
Gate to Source Voltage	$BV_{GSO}$	-30	Volts
Peak Forward Gate Current	$I_{GF}$	100	mA
Peak Drain Current	$I_D$	400	mA
Power Dissipation (free air)	$P_D$	400	mW
Derating Factor (free air)	$D_F$	2.3	$mW/^\circ C$
Junction Temp. (Oper. & Store)	$T_J$	-65°C to +200°C	
Lead Temp. (@ 1/16" to 1/32" from case)	$T_L$	240°C for 10 sec.	



**ELECTRICAL CHARACTERISTICS:  $T_A = 25^\circ C$  (UNLESS OTHERWISE STATED)**

PARAMETERS and CONDITIONS	SYMBOL	CONDITION	CM800			UNITS
			Min.	Typ.	Max.	
Gate Leakage Current	$I_{GSS}$	$V_{GS} = -15V, V_{DS} = 0$	-	-	0.4	nA
Gate Leakage Current	$I_{GSS}$	$V_{GS} = -15V, V_{DS} = 0, T_A = 125^\circ C$	-	-	1.0	$\mu A$
Drain Cutoff Current	$I_{D OFF}$	$V_{GS} = -7V, V_{DS} = 5V$	-	-	0.4	nA
Drain Cutoff Current	$I_{D OFF}$	$V_{GS} = -7V, V_{DS} = 5V, T_A = 125^\circ C$	-	-	1.0	$\mu A$
Pinch-Off Voltage	$V_{PO}$	$V_{DS} = 5V, I_{DS} = 1nA$	1.0	4.0	7.0	Volts
On Resistance	$R_{DS}$	$V_{GS} = 0, I_{DS} = 1mA$	10	20	30	Ohms
Drain Current*	$I_{DSS}$	$V_{DS} = 10V, V_{GS} = 0$	30	-	-	mA
Gate to Source Cap.	$C_{GS}$	$V_{GS} = -20V$	-	5	6	pf
Gate to Drain Cap.	$C_{GD}$	$V_{GD} = -20V$	-	5	6	pf

\* Pulse Measurement 1% Duty Cycle 10ms Max.

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