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MTM55N08
MTM55N10
MTM60N05
MTM60N06

55 and 60 AMPERE
N-CHANNEL TMOS
POWER FETs
 $r_{DS(on)} = 0.04 \text{ OHM}$
 80 and 100 VOLTS
 $r_{DS(on)} = 0.028 \text{ OHM}$
 50 and 60 VOLTS

MAXIMUM RATINGS

Rating	Symbol	MTM				Unit
		60N05	60N06	55N08	55N10	
Drain-Source Voltage	V_{DS}	50	60	80	100	Vdc
Drain-Gate Voltage ($R_{GS} = 1 \text{ M}\Omega$)	V_{DGR}	50	60	80	100	Vdc
Gate-Source Voltage Continuous Non-repetitive ($t_p \leq 50 \mu s$)	V_{GS} V_{GSM}	± 20 ± 40				Vdc Vpk
Drain Current Continuous Pulsed	I_D I_{DM}	60 300		55 275		Adc
Total Power Dissipation @ $T_C = 25^\circ C$ Derate above $25^\circ C$	P_D	250 2				Watts W/°C
Operating and Storage Temperature Range	T_J, T_{stg}	-65 to 150				°C

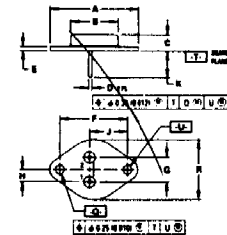
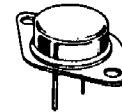
THERMAL CHARACTERISTICS

Thermal Resistance Junction to Case	$R_{\theta JC}$	0.5	°C/W
Maximum Lead Temp. for Soldering Purposes, 1/8" from case for 5 seconds	T_L	275	°C

ELECTRICAL CHARACTERISTICS ($T_C = 25^\circ C$ unless otherwise noted)

Characteristic	Symbol	Min	Max	Unit
OFF CHARACTERISTICS				
Drain-Source Breakdown Voltage ($V_{GS} = 0, I_D = 5.0 \text{ mA}$)	$V_{BR(DSS)}$	50 60 80 100	—	Vdc
Zero Gate Voltage Drain Current ($V_{DS} = \text{Rated } V_{DS}, V_{GS} = 0$) $T_C = 125^\circ C$	I_{DSS}	—	10 100	μAdc
Gate-Body Leakage Current ($V_{GS} = 20 \text{ Vdc}, V_{DS} = 0$)	I_{GSS}	—	100	nAdc
ON CHARACTERISTICS*				
Gate Threshold Voltage ($V_{DS} = V_{GS}, I_D = 1 \text{ mA}$), $V_{DS} = V_{GS}$ $T_J = 100^\circ C$	$V_{GS(th)}$	2 1.5	4.5 4	Vdc
Static Drain-Source On-Resistance ($V_{GS} = 10 \text{ Vdc}, I_D = 30 \text{ Adc}$) ($V_{GS} = 10 \text{ Vdc}, I_D = 27.5 \text{ Adc}$)	$r_{DS(on)}$	—	0.028 0.04	Ohm
Drain-Source On-Voltage ($V_{GS} = 10 \text{ V}$) ($I_D = 60 \text{ Adc}$) ($I_D = 30 \text{ Adc}, T_J = 100^\circ C$) ($I_D = 55 \text{ Adc}$) ($I_D = 27.5 \text{ Adc}, T_C = 100^\circ C$)	$V_{DS(on)}$	—	1.98 1.68 2.6 2.2	Vdc
Forward Transconductance ($V_{DS} = 15 \text{ V}, I_D = 30 \text{ A}$) ($V_{DS} = 15 \text{ V}, I_D = 27.5 \text{ A}$)	g_{FS}	10 10	—	mhos

MTM60N08
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NOTES:
 1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
 2. CONTROLLING DIMENSION: INCH.

STYLE 3
 PIN 1: GATE
 2: SOURCE
 CASE: DRAWN

DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	28.28	30.27	1.110	1.190
B	19.37	21.08	0.760	0.830
C	6.35	8.25	0.250	0.325
D	1.27	1.60	0.050	0.063
E	1.52	1.77	0.060	0.070
F	30.15 BSC		1.187 BSC	
G	10.93 BSC		0.430 BSC	
H	3.48 BSC		0.137 BSC	
J	18.80 BSC		0.740 BSC	
K	11.18	12.18	0.440	0.480
L	3.86	4.19	0.151	0.166
M	25.15	26.87	0.990	1.059
U	3.86	4.19	0.151	0.166

TO-204AE



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