



## LET8180

### ELECTRICAL SPECIFICATION (T<sub>CASE</sub> = 25 °C)

#### STATIC (Per Section)

Symbol	Test Conditions		Min.	Typ.	Max.	Unit
V <sub>(BR)DSS</sub>	V <sub>GS</sub> = 0 V	I <sub>D</sub> = 10 μA	65			V
I <sub>DSS</sub>	V <sub>GS</sub> = 0 V	V <sub>DS</sub> = 32 V			10	μA
I <sub>GSS</sub>	V <sub>GS</sub> = 5 V	V <sub>DS</sub> = 0 V			1	μA
V <sub>GS(Q)</sub>	V <sub>DS</sub> = 32 V	I <sub>D</sub> = TBD	2.5		4.5	V
V <sub>DS(ON)</sub>	V <sub>GS</sub> = 10 V	I <sub>D</sub> = 3 A		0.28	0.45	V
G <sub>FS</sub>	V <sub>DS</sub> = 10 V	I <sub>D</sub> = 3 A		2.6		mho
C <sub>ISS</sub> *	V <sub>GS</sub> = 0 V	V <sub>DS</sub> = 32 V		TBD		pF
C <sub>OSS</sub>	V <sub>GS</sub> = 0 V	V <sub>DS</sub> = 32 V			70	pF
C <sub>RSS</sub>	V <sub>GS</sub> = 0 V	V <sub>DS</sub> = 32 V		2.5		pF

\* Includes Internal Input Moscap.

Symbol	Test Conditions		Min.	Typ.	Max.	Unit
<b>DYNAMIC (f = 860 MHz)</b>						
P <sub>OUT</sub> <sup>(1)</sup>	V <sub>DD</sub> = 32 V	I <sub>DQ</sub> = TBD	200	220		W
η <sub>D</sub> <sup>(1)</sup>	V <sub>DD</sub> = 32 V	I <sub>DQ</sub> = TBD	50	60		%
G <sub>P</sub> <sup>(2)</sup>	V <sub>DD</sub> = 32 V	I <sub>DQ</sub> = TBD P <sub>OUT</sub> = 200 W PEP	16	17		dB
IMD3 <sup>(2)</sup>	V <sub>DD</sub> = 32 V	I <sub>DQ</sub> = TBD P <sub>OUT</sub> = 200 W PEP		-31		dBc
Load mismatch	V <sub>DD</sub> = 32 V	I <sub>DQ</sub> = TBD P <sub>OUT</sub> = 200 W ALL PHASE ANGLES	10:1			VSWR
<b>DYNAMIC (f = 470 - 860 MHz)</b>						
P <sub>OUT</sub> <sup>(1)</sup>	V <sub>DD</sub> = 32 V	I <sub>DQ</sub> = TBD	180			W
η <sub>D</sub> <sup>(1)</sup>	V <sub>DD</sub> = 32 V	I <sub>DQ</sub> = TBD	50			%
G <sub>P</sub> <sup>(1)</sup>	V <sub>DD</sub> = 32 V	I <sub>DQ</sub> = TBD	14.5			dB

(1) 1 dB Compression point

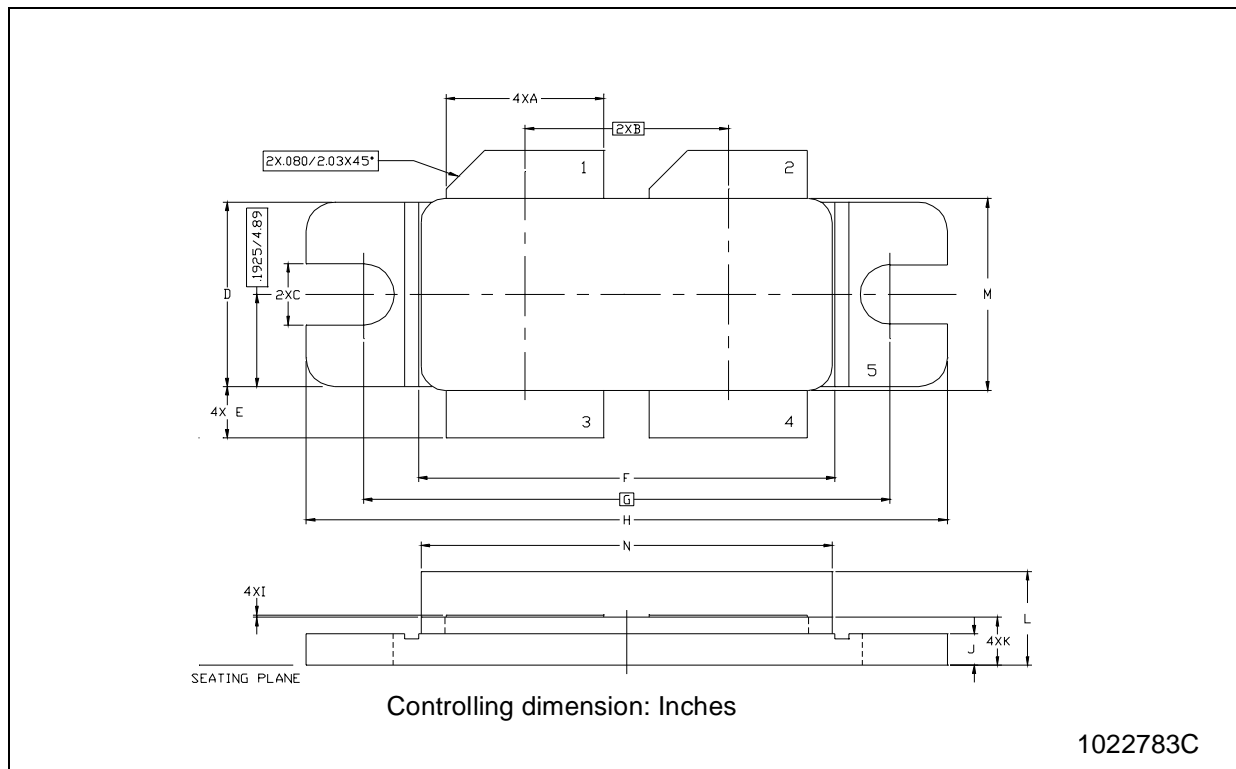
(2) f<sub>1</sub> = 860 MHz, f<sub>2</sub> = 860.1 MHz

#### ESD PROTECTION CHARACTERISTICS

Test Conditions	Class
Human Body Model	2
Machine Model	M3

**M252 (.400 x .860 4L BAL N/HERM W/FLG) MECHANICAL DATA**

DIM.	mm			Inch		
	MIN.	TYP.	MAX	MIN.	TYP.	MAX
A	8.13		8.64	.320		.340
B		10.80			.425	
C	3.00		3.30	.118		.130
D	9.65		9.91	.380		.390
E	2.16		2.92	.085		.115
F	21.97		22.23	.865		.875
G		27.94			1.100	
H	33.91		34.16	1.335		1.345
I	0.10		0.15	.004		.006
J	1.52		1.78	.060		.070
K	2.36		2.74	.093		.108
L	4.57		5.33	.180		.210
M	9.96		10.34	.392		.407
N	21.64		22.05	.852		.868



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