

RF POWER FIELD-EFFECT TRANSISTOR

DESCRIPTION:

The **ASI MRF175GU** is a N-Channel Enhancement-Mode Push Pull MOSFET, Designed for FM, and TV Solid State Transmitter Applications up to 500 MHz.

MAXIMUM RATINGS

I_D	26 A
V_{DSS}	65 V
P_{DISS}	400 W @ T _C = 25 °C
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +150 °C
θ_{JC}	0.44 °C/W

PACKAGE STYLE

	MINIMUM INCHES/MM	MAXIMUM INCHES/MM
A	.850/21.59	.870/22.10
B	.395/10.03	.407/10.34
C		.125/3.18
D		.1925/4.889
E	.580/14.73	.620/15.75
F		.660/16.76
G	1.090/27.69	1.105/28.07
H	1.335/33.91	1.345/34.16
I	.003/0.08	.007/0.18
J	.060/1.52	.070/1.78
K	.082/2.08	.097/2.46
L		.205/5.21

1 = DRAIN 2 = DRAIN(2) 3 = GATE(1)
4 = GATE(2) 5 = SOURCE (1&2) -CASE

CHARACTERISTICS T_C = 25 °C

SYMBOL	TEST CONDITIONS			MINIMUM	TYPICAL	MAXIMUM	UNITS
V_{(BR)DSS}	I _D = 50 mA	V _{GS} = 0 V		65			V
I_{DSS}	V _{DS} = 28 V	V _{GS} = 0 V				2.5	mA
I_{GSS}	V _{DS} = 0 V	V _{GS} = 20 V				1.0	μA
V_{GS(th)}	I _D = 100 mA	V _{DS} = 10 V		1.0	3.0	6.0	V
V_{DS(on)}	I _D = 5.0 A	V _{GS} = 10 V				1.5	V
g_{fs}	I _D = 2.5 A	V _{DS} = 10 V		2.0	3.0		mhos
C_{iss} C_{oss} C_{rss}	V _{DS} = 28 V	V _{GS} = 0 V			180 200 20		pF
G_{ps} η ψ	V _{DD} = 28 V	I _{DQ} = 2 X 100 mA	P _{OUT} = 150 W f = 400 MHz	10 50 10:1	12 55 ---		dB % ---