

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI MRF377** is Designed for broadband commercial and industrial applications in 470 to 860 MHz band. Ideal for large-signal, common source amplifier in 32 V digital television transmitter equipment.

FEATURES:

- $P_G = 16.5$ dB min. at 45 W/860 MHz
- $\eta = 21$ % Minimum
- **Omnigold™** Metalization System

MAXIMUM RATINGS

I_D	17.0 A
V_{DSS}	65 V
V_{GS}	15 V
P_{DISS}	486 W @ $T_C = 25$ °C
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +150 °C
θ_{JC}	0.36 °C/W

PACKAGE STYLE .400 BAL FLG. (C)

DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.220 / 5.59	.230 / 5.84
B		.210 / 5.33
C	.120 / 3.05	.130 / 3.30
D	.380 / 9.65	.390 / 9.91
E	.780 / 19.81	.820 / 20.83
F		.435 / 11.05
G		1.090 / 27.69
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	.100 / 2.54
L		.205 / 5.21
M	.395 / 10.03	.407 / 10.34
N	.850 / 21.59	.870 / 22.10

CHARACTERISTICS $T_C = 25$ °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
V_{DSS}	$I_D = 10$ μ A	65			V
I_{DSS}	$V_{DS} = 32$ V			1.0	μ A
I_{GSS}	$V_{GS} = 5$ V			1.0	μ A
$V_{GS(th)}$	$V_{DS} = 10$ V $I_D = 200$ μ A		2.8		V
$V_{GS(Q)}$	$V_{DS} = 32$ V $I_D = 225$ mA		3.5		V
$V_{DS(ON)}$	$V_{GS} = 10$ V $I_D = 3.0$ A		0.27		V
C_{RSS}	$V_{DS} = 28$ V $f = 1.0$ MHz		3.2		pF
P_G	$V_{DD} = 32$ V $I_{DQ} = 2 \times 1000$ mA $P_{OUT} = 45$ W	16.5	18.2		dB
η	$f = 860$ MHz	21	22.9		%