



# MRF839F

## NPN SILICON RF POWER TRANSISTOR

### DESCRIPTION:

The **MRF839F** is Designed for Class AB, Common Emitter Applications Up to 960 MHz.

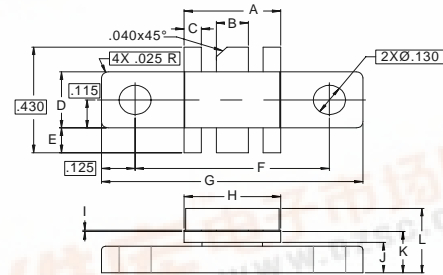
### FEATURES INCLUDE:

- Input Matching Network
- High Gain
- Gold Metalization

### MAXIMUM RATINGS

$I_C$	0.6 A
$V_{CES}$	36 V
$P_{DISS}$	20 W @ $T_C = 25^\circ C$
$T_J$	$-55^\circ C$ to $+200^\circ C$
$T_{STG}$	$-55^\circ C$ to $+150^\circ C$
$\theta_{JC}$	9.0 $^\circ C/W$

### PACKAGE STYLE .230 6L FLG



DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.355 / 9.02	.365 / 9.27
B	.115 / 2.92	.125 / 3.18
C	.075 / 1.91	.085 / 2.16
D	.225 / 5.72	.235 / 5.97
E	.090 / 2.29	.110 / 2.79
F	.720 / 18.29	.730 / 18.54
G	.970 / 24.64	.980 / 24.89
H	.355 / 9.02	.365 / 9.27
I	.004 / 0.10	.006 / 0.15
J	.120 / 3.05	.130 / 3.30
K	.160 / 4.06	.180 / 4.57
L	.230 / 5.84	.260 / 6.60

1 & 3 & 4 & 6 = EMITTER    2 = BASE  
5 = COLLECTOR

### CHARACTERISTICS $T_C = 25^\circ C$

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{CES}$	$I_C = 5.0$ mA	40			V
$BV_{CEO}$	$I_C = 5.0$ mA	16			V
$BV_{EBO}$	$I_E = 100$ $\mu$ A	3.5			V
$I_{CES}$	$V_{CE} = 15$ V			1	mA
$h_{FE}$	$V_{CE} = 5.0$ V $I_C = 100$ mA	10		150	---
$C_{OB}$	$V_{CB} = 15$ V $f = 1.0$ MHz			10	pF
$P_G$	$V_{CE} = 12.5$ V $I_{CQ} = 50$ mA $P_{OUT} = 3.0$ W	8.0	10.0		dB
$\eta_C$	$F_O = 870$ MHz	50			%

