

# NPN SILICON RF POWER TRANSISTOR

## DESCRIPTION:

The **ASI MRF5175** is Designed for High Power Class C Amplifier in, 225 to 400 MHz Military Communication Equipment.

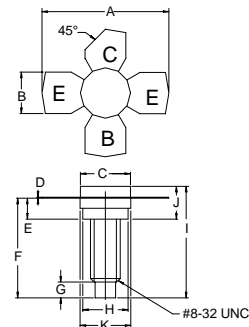
## FEATURES:

- Class C Operation
- $P_G = 11$  dB at 5.0 W/400 MHz
- **Omnigold™** Metalization System

## MAXIMUM RATINGS

$I_C$	1.0 A
$V_{CB}$	60 V
$V_{CE}$	33 V
$P_{DISS}$	12 W @ $T_C = 25^\circ\text{C}$
$T_J$	$-65^\circ\text{C}$ to $+200^\circ\text{C}$
$T_{STG}$	$-65^\circ\text{C}$ to $+150^\circ\text{C}$
$\theta_{JC}$	$12^\circ\text{C/W}$

## PACKAGE STYLE .280 4L STUD



DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	1.010 / 25.65	1.055 / 26.80
B	.220 / 5.59	.230 / 5.84
C	.270 / 6.86	.285 / 7.24
D	.003 / 0.08	.007 / 0.18
E	.117 / 2.97	.137 / 3.48
F		.572 / 14.53
G		.130 / 3.30
H	.245 / 6.22	.255 / 6.48
I		.640 / 16.26
J	.175 / 4.45	.217 / 5.51
K	.275 / 6.99	.285 / 7.24

## CHARACTERISTICS $T_C = 25^\circ\text{C}$

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
$BV_{CEO}$	$I_C = 30$ mA	33			V
$BV_{CES}$	$I_C = 30$ mA	60			V
$BV_{EBO}$	$I_E = 1.0$ mA	4.0			V
$I_{CBO}$	$V_{CB} = 30$ V			0.5	mA
$h_{FE}$	$V_{CE} = 5.0$ V $I_C = 250$ mA	10		100	---
$C_{ob}$	$V_{CB} = 30$ V $f = 1.0$ MHz			15	pF
$P_G$	$V_{CC} = 28$ V $P_{OUT} = 5.0$ W $f = 400$ MHz	11			dB
$\eta_D$		50			%