

NPN SILICON RF-MICROWAVE POWER TRANSISTOR

DESCRIPTION:

The **ASI TPR175** is a common base transistor Designed for pulsed systems in the frequency band 1030-1090 MHz.

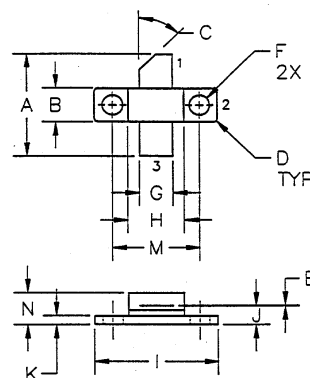
FEATURES:

- Common Base
- Internal Matching Network
- $P_G = 8.0$ dB at 175 W/1090 MHz
- **Omnigold™** Metalization System

MAXIMUM RATINGS

I_C	12.5 A
V_{CES}	55 V
V_{EBO}	3.5 V
P_{DISS}	388 W @ $T_C = 25^\circ\text{C}$
T_J	-65°C to $+200^\circ\text{C}$
T_{STG}	-65°C to $+150^\circ\text{C}$
θ_{JC}	0.45 $^\circ\text{C/W}$

PACKAGE STYLE



DIM	MILLIMETER	TOL	INCHES	TOL
A	17.78	.76	.700	.030
B	5.84	.13	.230	.005
C	45°	5°	45°	5°
D	0.63R	.13	.025R	.005
E	.13	.02	.005	.001
F	3.30 DIA	.13	.130 DIA	.005
G	5.46	.13	.215	.005
H	9.14	.13	.360	REF
I	20.32	.13	.800	.005
J	3.17	.25	.125	.010
K	1.52	.13	.060	.005
M	14.22	.13	.560	.005
N	5.46	REF	.215	REF

1 = Collector 2 = Base 3 = Emitter

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

SYMBOL	TEST CONDITIONS		MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CES}	$I_C = 20$ mA		55			V
BV_{EBO}	$I_E = 5.0$ mA		3.5			V
h_{FE}	$V_{CE} = 5.0$ V	$I_C = 20$ mA	10			---
P_G	$V_{CE} = 50$ V	$P_{OUT} = 175$ W	8.0	9.0		dB
$VSRW$		$f = 1090$ MHz			00:1	
η_c				40		%