

# NPN SILICON RF POWER TRANSISTOR

**DESCRIPTION:**

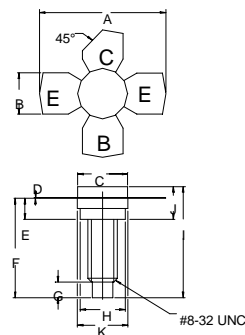
The **ASI CD6105A** is Designed for Class C Amplifiers in 225 to 400 MHz Military Communication Equipment.

**FEATURES:**

- $P_G = 7.8$  dB Typical at 400 MHz
- Economical .280" Stud Package
- **Omnigold™** Metalization System

**MAXIMUM RATINGS**

$I_C$	5.0 A
$V_{CES}$	65 V
$V_{EBO}$	4.0 V
$P_{DISS}$	70 W @ $T_C = 25^\circ\text{C}$
$T_J$	-65 °C to +200 °C
$T_{STG}$	-65 °C to +150 °C
$\theta_{JC}$	2.5 °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
$BV_{CES}$	$I_C = 10$ mA	65			V
$BV_{EBO}$	$I_E = 5.0$ mA	4.0			V
$I_{CBO}$	$V_{CB} = 30$ V			3.0	mA
$h_{FE}$	$V_{CE} = 5.0$ V $I_C = 500$ mA	10		120	---
$C_{OB}$	$V_{CB} = 28$ V $f = 1.0$ MHz		35	40	pF
$P_G$	$V_{CC} = 28$ V $P_{OUT} = 30$ W $f = 400$ MHz	7.8			dB
$\eta$		60	65		%