

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI 2N5642** is Designed for
28 V Large Signal Class C Amplifier
Applications up to 175 MHz.

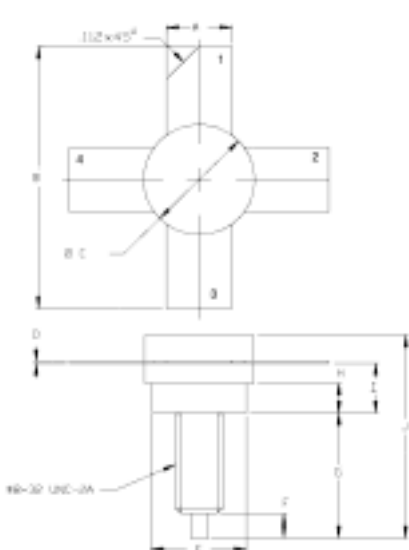
FEATURES INCLUDE:

- Emitter Ballasting
- Gold Metalization
- 3/8" SOE Stud Package

MAXIMUM RATINGS

I_C	3.0 A
V_{CE}	35 V
V_{CB}	65 V
P_{DISS}	30 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}	5.8 $^\circ\text{C/W}$

PACKAGE STYLE .380" 4L STUD		
	MINIMUM Inches/mm	MAXIMUM Inches/mm
A	.220/5,59	.230/5,84
B	.980/24,89	
C	.370/9,40	.385/9,78
D	.004/0,10	.007/0,18
E	.320/8,13	.330/8,38
F	.100/2,54	.130/3,30
G	.450/11,43	.490/12,45
H	.090/2,29	.100/2,54
I	.155/3,94	.175/4,45
J		.750/19,05



1 = COLLECTOR 2 & 4 = EMITTER
3 = BASE

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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CES}	$I_C = 200\text{ mA}$	65			V
BV_{CEO}	$I_C = 200\text{ mA}$	35			V
BV_{EBO}	$I_E = 10\text{ mA}$	4.0			V
I_{CBO}	$V_{CB} = 30\text{ V}$			1.0	mA
h_{FE}	$V_{CE} = 5.0\text{ V}$ $I_C = 200\text{ mA}$	5.0			---
C_{OB}	$V_{CB} = 30\text{ V}$ $f = 1.0\text{ MHz}$			35	pF
P_G η_C	$V_{CC} = 28\text{ V}$ $P_{OUT} = 20\text{ W}$ $f = 175\text{ MHz}$	8.2 60	10		dB %