

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 °C
T_J	-65 °C to + 200 °C
T_{STG}	-65 °C to + 150 °C
θ_{JC}	5.8 °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 °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CES}	I _C = 200 mA	65			V
BV_{CEO}	I _C = 200 mA	35			V
BV_{EBO}	I _E = 10 mA	4.0			V
I_{CB0}	V _{CB} = 30 V			1.0	mA
h_{FE}	V _{CE} = 5.0 V I _C = 200 mA	5.0			---
C_{OB}	V _{CB} = 30 V f = 1.0 MHz			35	pF
P_G η_C	V _{CC} = 28 V P _{OUT} = 20 W f = 175 MHz	8.2 60	10		dB %