

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **B12-28** is Designed for Class C Power Amplifier Applications up to 250 MHz.

FEATURES:

- $P_G = 13$ dB Typical at 12 W/175 MHz
- ∞ Load VSWR at Rated Conditions
- **Omnigold™** Metallization System

MAXIMUM RATINGS

I_C	3.0 A
V_{CB}	60 V
P_{DISS}	27 W @ $T_C = 25^\circ\text{C}$
T_J	-55°C to $+200^\circ\text{C}$
T_{STG}	-55°C to $+150^\circ\text{C}$
θ_{JC}	6.5 $^\circ\text{C/W}$

PACKAGE STYLE .380" 4L STUD

DIM	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

ORDER CODE: ASI10801

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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIM	UNITS
BV_{CBO}	$I_C = 200$ mA	60			V
BV_{CEO}	$I_C = 200$ mA	35			V
BV_{EBO}	$I_E = 10$ mA	4.0			V
I_{CBO}	$V_{CB} = 30$ V			250	μA
h_{FE}	$V_{CE} = 5.0$ V $I_C = 500$ mA	20		200	---
C_{ob}	$V_{CB} = 30$ V $f = 1.0$ MHz			30	pF
P_G	$V_{CC} = 28$ V $P_{OUT} = 12$ W $f = 175$ MHz	10.8	13		dB
η_c		50	60		%