NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

The **ASI BM30-12** is Designed for VHF land mobil applications in the 150-175 MHZ range.

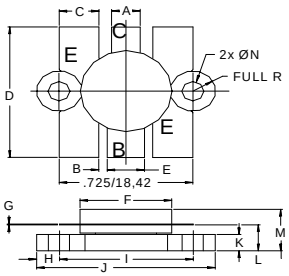
FEATURES:

- Common Emitter
- P_{OUT} = 30 W at175 MHz
- ***Omnigold***™ Metalization System
- Internal Matching network

MAXIMUM RATINGS

I_C	8.0 A
V_{CES}	36 V
V_{CEO}	18 V
V_{EBO}	4.0 V
P_{DISS}	65 W @ T_C = 25 °C
T_J	-65 °C to +200 °C
T_{STG}	-65 °C to +200 °C
θ_{JC}	2.7 °C/W

PACKAGE STYLE .500 6L FLG



DIM	MINIMUM inches / mm	MAXIMUM inches / mm
A	.150 / 3.43	.160 / 4.06
B	.045 / 1.14	
C	.210 / 5.33	.220 / 5.59
D	.835 / 21.21	.865 / 21.97
E	.200 / 5.08	.210 / 5.33
F	.490 / 12.45	.510 / 12.95
G	.003 / 0.08	.007 / 0.18
H	.125 / 3.18	
I	.725 / 18.42	
J	.970 / 24.64	.980 / 24.89
K	.090 / 2.29	.105 / 2.67
L	.150 / 3.81	.170 / 4.32
M		.285 / 7.24
N	.120 / 3.05	.135 / 3.43

CHARACTERISTICS T_C = 25 °C

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{CES}	I_C = 20 mA	36			V
BV_{CEO}	I_C = 50 mA	18			
BV_{EBO}	I_E = 5.0 mA	4.0			V
C_{ob}	V_{CB} = 12.5 V f = 1.0 MHz		110		pF
P_{OUT}	V_{CC} = 12.5 V P_{OUT} = 40 W f = 175 MHz	30			W
P_{IN}			4.5		W
η_C			60		%
Z_{IN}	P_{OUT} = 30 W f = 175 MHz		1.0 + j1.4		Ω
Z_L			1.75 + j0.5		Ω