



BM30-12

NPN SILICON RF POWER TRANSISTOR

DESCRIPTION:

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

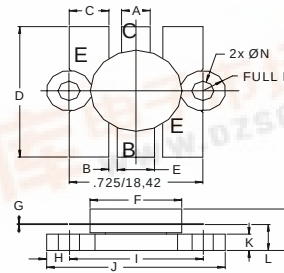
FEATURES:

- Common Emitter
- $P_{OUT} = 30\text{ W}$ at 175 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 @ $T_C = 25\text{ }^{\circ}\text{C}$
T_J	-65 $^{\circ}\text{C}$ to +200 $^{\circ}\text{C}$
T_{STG}	-65 $^{\circ}\text{C}$ to +200 $^{\circ}\text{C}$
θ_{JC}	2.7 $^{\circ}\text{C/W}$

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

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

