

RF POWER MOSFET

N-Channel Enhancement Mode

DESCRIPTION:

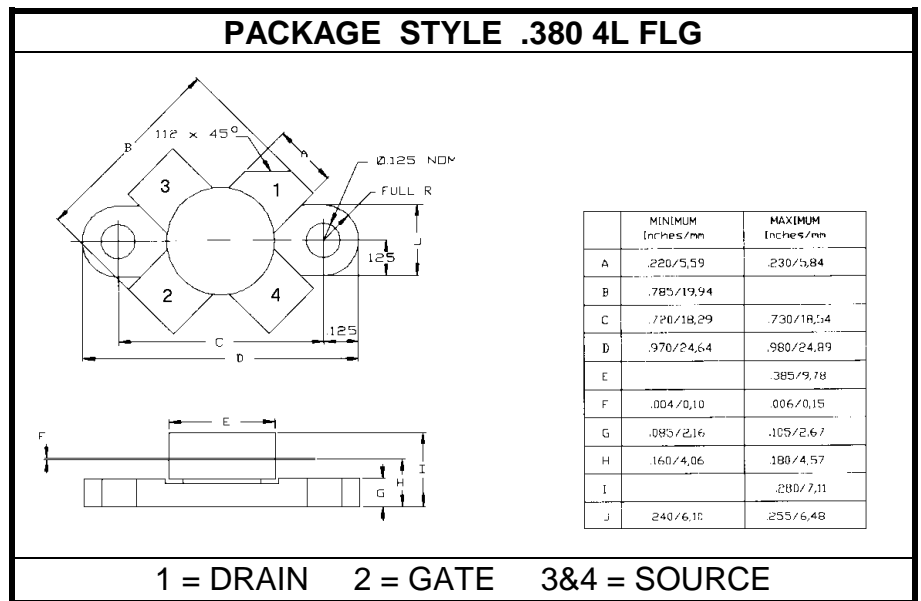
The **ASI BLF245** is a vertical D-MOS transistor designed for large signal amplifier applications in the VHF frequency range.

FEATURES INCLUDE:

- $P_G = 13$ dB Typical at 175 MHz
- 30:1 Load VSWR Capability
- **Omnigold™** metalization system

MAXIMUM RATINGS

I_D	6.0 A
V_{DS}	65 V
V_{GS}	± 20 V
P_{DISS}	68 W @ $T_C = 25^\circ C$
T_J	$-65^\circ C$ to $+150^\circ C$
T_{STG}	$-65^\circ C$ to $+200^\circ C$
θ_{JC}	1.8 $^\circ C/W$


CHARACTERISTICS $T_C = 25^\circ C$

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{DSS}	$I_D = 10$ mA	65			V
I_{DSS}	$V_{DS} = 28$ V $V_{GS} = 0$ V			2.0	mA
I_{GSS}	$V_{DS} = 0$ V $V_{GS} = \pm 20$ V			1.0	μA
$V_{GS(th)}$	$V_{DS} = 10$ V $I_D = 10$ mA	2.0		4.5	V
g_{fs}	$V_{DS} = 10$ V $I_D = 1.5$ A	1.2	1.9		S
C_{iss} C_{oss} C_{rss}	$V_{DS} = 28$ V $V_{GS} = 0$ V $f = 1.0$ MHz		125 75 7.0		pF
P_G η_D	$V_{DS} = 28$ V $I_{DQ} = 25$ mA $P_{out} = 30$ W $f = 150$ MHz	13 50	16 60		dB %
ψ	$V_{SWR} = 30:1$ AT ALL PHASE ANGLES	NO DEGRADATION IN OUTPUT POWER			