

VHF POWER MOSFET

N-Channel Enhancement Mode

DESCRIPTION:

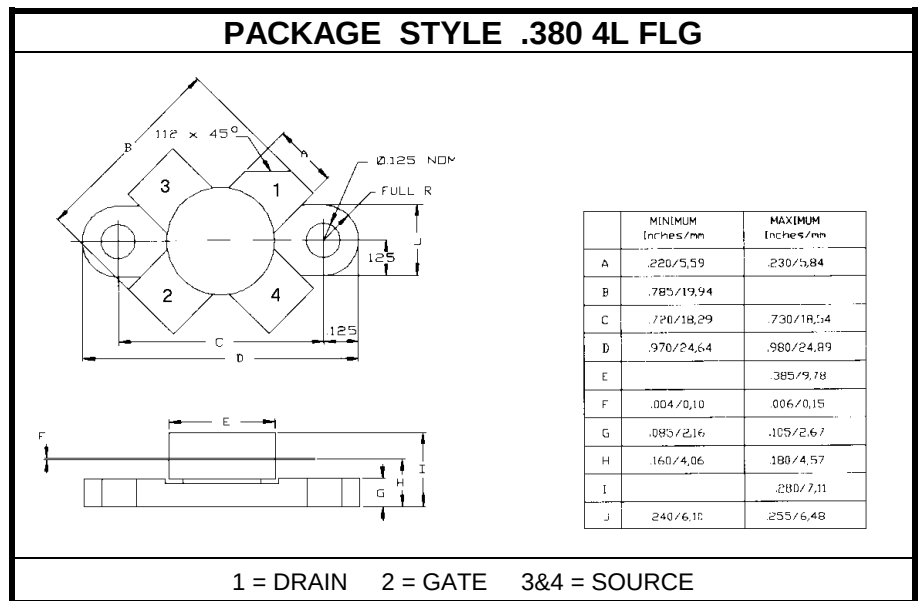
The **ASI BLF246** is a vertical D-MOS transistor designed for large signal amplifier applications in the VHF frequency range.

FEATURES INCLUDE:

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

MAXIMUM RATINGS

I_D	13 A
V_{DS}	65 V
V_{GS}	± 20 V
P_{DISS}	130 W @ $T_C = 25^\circ\text{C}$
T_J	-65°C to $+150^\circ\text{C}$
T_{STG}	-65°C to $+200^\circ\text{C}$
θ_{JC}	1.35°C/W


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

SYMBOL	TEST CONDITIONS		MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{DSS}	$I_D = 50$ mA		65			V
I_{DSS}	$V_{DS} = 28$ V	$V_{GS} = 0$ V			2.5	mA
I_{GSS}	$V_{DS} = 0$ V	$V_{GS} = \pm 20$ V			1.0	μA
$V_{GS(th)}$	$V_{DS} = 10$ V	$I_D = 50$ mA	2.0		4.5	V
g_{fs}	$V_{DS} = 10$ V	$I_D = 2.5$ A	3.0	4.2		S
$R_{DS(on)}$	$V_{GS} = 10$ V	$I_D = 5.0$ A		0.2	0.3	Ω
C_{is} C_{os} C_{rs}	$V_{DS} = 28$ V	$V_{GS} = 0$ V	$f = 1.0$ MHz		225 180 25	pF
P_G η_D	$V_{DS} = 28$ V $I_{DQ} = 0.1$ A	$P_{out} = 80$ W	$f = 108$ MHz		16 55	dB %