

# RF POWER MOSFET

## N-Channel Enhancement Mode

**DESCRIPTION:**

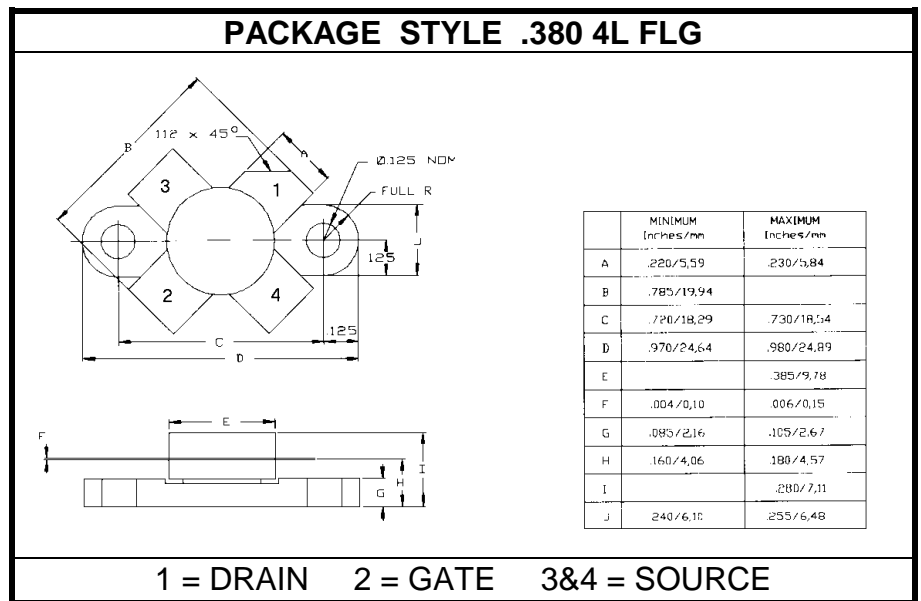
The **ASI BLF245** is a vertical D-MOS transistor designed for large signal amplifier applications in the VHF frequency range.

**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
$V_{GS}$	$\pm 20$ V
$P_{DISS}$	68 W @ $T_C = 25^\circ\text{C}$
$T_J$	$-65^\circ\text{C}$ to $+150^\circ\text{C}$
$T_{STG}$	$-65^\circ\text{C}$ to $+200^\circ\text{C}$
$\theta_{JC}$	1.8 $^\circ\text{C/W}$


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

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	$\mu\text{A}$
$V_{GS(th)}$	$V_{DS} = 10$ 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
$P_G$ $\eta_D$	$V_{DS} = 28$ V $I_{DQ} = 25$ mA $P_{out} = 30$ W $f = 150$ MHz	13 50	16 60		dB %
$\psi$	$V_{SWR} = 30:1$ AT ALL PHASE ANGLES	NO DEGRADATION IN OUTPUT POWER			