

VHF POWER MOSFET

N-Channel Enhancement Mode

DESCRIPTION:

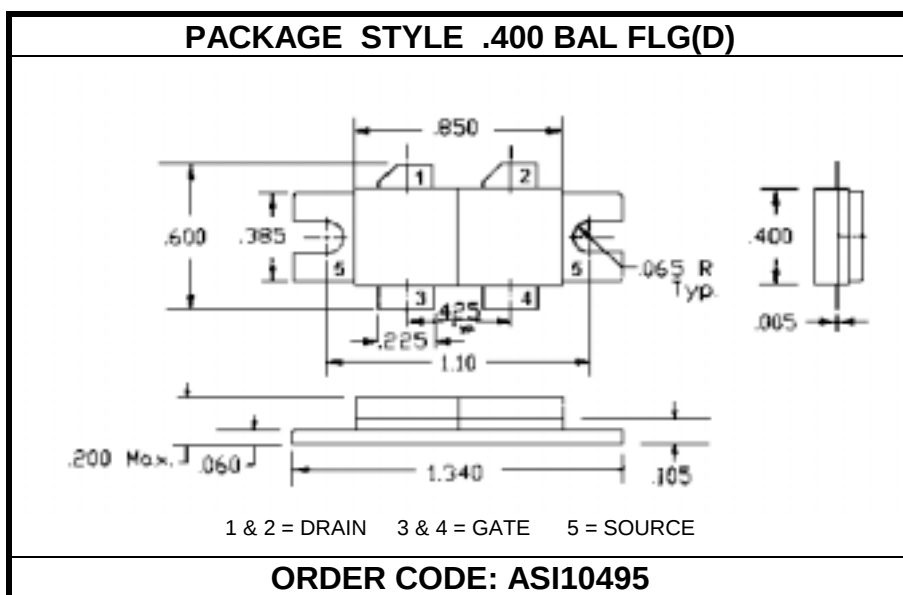
The **ASI BLF248** is a Balanced N-Channel Enhancement-Mode RF Power MOSFET Designed for AM and FM Power Amplifier Applications up to 250 MHz.

FEATURES INCLUDE:

- $P_G = 11$ dB Typical at 225 MHz
- 5:1 Load VSWR Capability
- *Omnigold™* metalization system

MAXIMUM RATINGS

I_D	40 A
V_{DSS}	65 V
V_{GS}	± 40 V
P_{DISS}	500 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}	0.35°C/W


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

SYMBOL	TEST CONDITIONS	MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{DSS}	$I_D = 100$ mA	65			V
I_{DSS}	$V_{DS} = 28$ V $V_{GS} = 0$ V			5.0	mA
I_{GSS}	$V_{DS} = 0$ V $V_{GS} = 20$ V			1.0	μA
$V_{GS(th)}$	$V_{DS} = 10$ V $I_D = 100$ mA	1.0		5.0	V
g_{fs}	$V_{DS} = 10$ V $I_D = 5.0$ A	3,500			mS
C_{iss} C_{oss} C_{rss}	$V_{DS} = 50$ V $V_{GS} = 0$ V $f = 1.0$ MHz		380 190 25		pF
P_G η_D	$V_{DD} = 28$ V $I_{DQ} = 2 \times 250$ mA $P_{out} = 300$ W $f = 225$ MHz	10 50	11 55		dB %
ψ	$V_{SWR} = 5:1$ AT ALL PHASE ANGLES	NO DEGRADATION IN OUTPUT POWER			