

POWER MOSFET

N-Channel Enhancement Mode

DESCRIPTION:

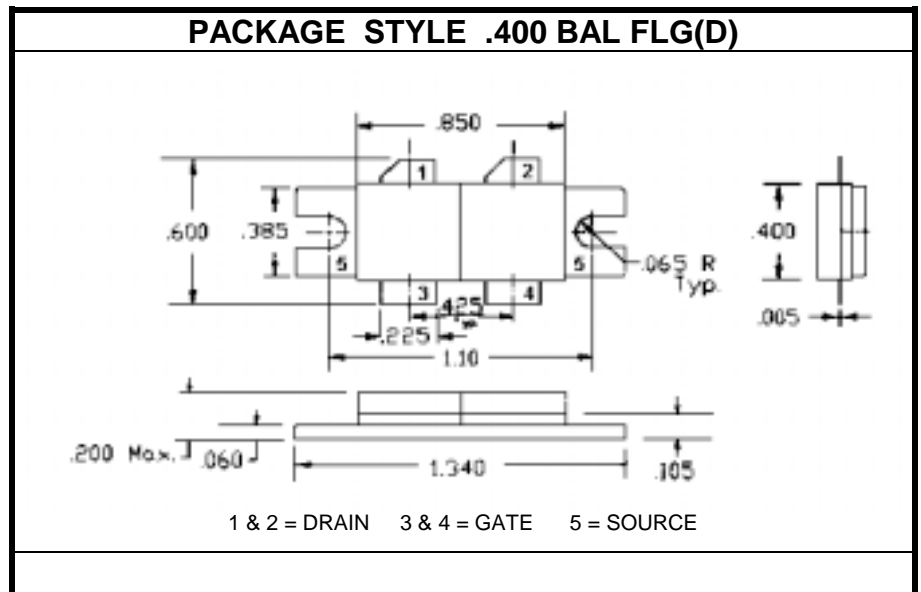
The **ASI BLF378** is a N-Channel Enhancement-Mode RF Power MOSFET Designed for broadband RF Applications up to 225 MHz.

FEATURES INCLUDE:

- $P_G = 14$ dB Min. at 225 MHz
- 20:1 Load VSWR Capability
- **Omnigold™** metalization system

MAXIMUM RATINGS

I_D	18 A
V_{DSS}	125 V
V_{GS}	20 V
P_{DISS}	500 W @ $T_C = 25^\circ\text{C}$
T_J	-65°C to $+200^\circ\text{C}$
T_{STG}	-65°C to $+150^\circ\text{C}$
θ_{JC}	0.35°C/W


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

SYMBOL	TEST CONDITIONS		MINIMUM	TYPICAL	MAXIMUM	UNITS
BV_{DSS}	$I_D = 40$ mA	$V_{GS} = 0$ V	125			V
I_{DSS}	$V_{DS} = 50$ V	$V_{GS} = 0$ V			5.0	mA
I_{GSS}	$V_{DS} = 0$ V	$V_{GS} = 30$ V			1.0	μA
V_{GS}	$V_{GS} = V_{DS}$	$I_{DS} = 300$ mA	1.0		7.0	V
gM	$V_{DS} = 10$ V	$V_{GS} = 5.0$ V		5.5		Mho
R_{DSON}	$V_{GS} = 20$ V	$I_{DS} = 6.0$ A		0.30		Ω
I_{DSAT}	$V_{GS} = 20$ V	$V_{DS} = 10$ V		35		A
C_{iss}	$V_{DS} = 50$ V	$V_{GS} = 0$ V	$f = 1.0$ MHz	400		pF
C_{oss}				200		
C_{rss}				15		
P_{GS}	$V_{DS} = 50$ V	$I_{DQ} = 0.8$ A	$f = 225$ MHz	14		dB
η				50		
ψ						