

# POWER MOSFET

## N-Channel Enhancement Mode

**DESCRIPTION:**

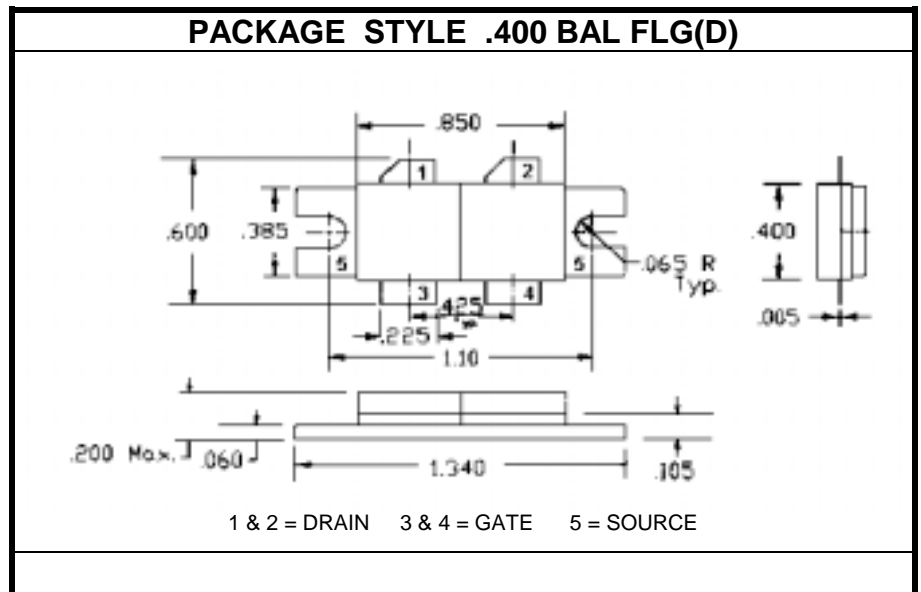
The **ASI BLF378** is a N-Channel Enhancement-Mode RF Power MOSFET Designed for broadband RF Applications up to 225 MHz.

**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 @ $T_C = 25^\circ C$
$T_J$	$-65^\circ C$ to $+200^\circ C$
$T_{STG}$	$-65^\circ C$ to $+150^\circ C$
$\theta_{JC}$	$0.35^\circ C/W$


**CHARACTERISTICS**  $T_C = 25^\circ C$ 

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	$\mu A$
$V_{GS}$	$V_{GS} = V_{DS}$	$I_{DS} = 300$ 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		$\Omega$
$I_{DSAT}$	$V_{GS} = 20$ 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
$\eta$				50		
$\psi$						