

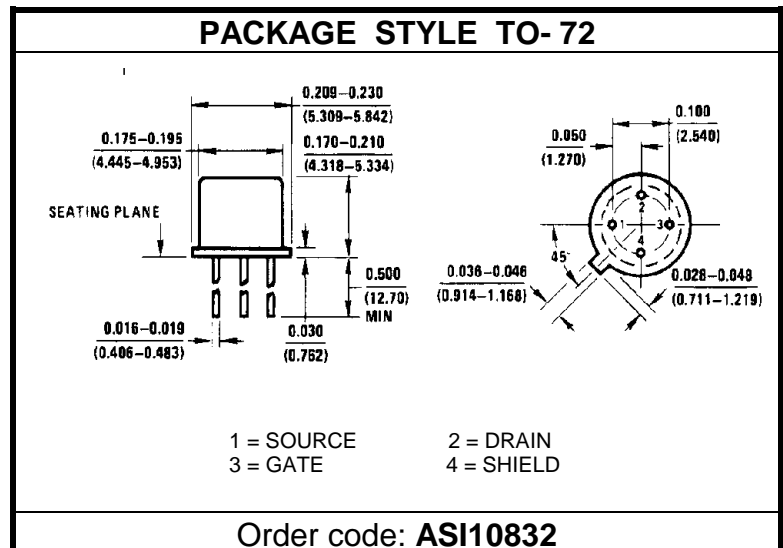
# N-CHANNEL SILICON FET DEPLETION MODE

**DESCRIPTION:**

The **ASI BFW13** is Designed for Low Noise Video Amplifier Applications.

**MAXIMUM RATINGS**

$I_D$	10 mA
$I_G$	5.0 mA
$V_{DS}$	30 V
$V_{DG}$	30 V
$V_{GS}$	30 V
$P_{tot}$	150 mW @ $T_A = 110^\circ\text{C}$
$T_J$	$-65^\circ\text{C}$ to $+200^\circ\text{C}$
$T_{STG}$	$-65^\circ\text{C}$ to $+200^\circ\text{C}$
$\theta_{JA}$	590 $^\circ\text{C}/\text{W}$


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

SYMBOL	TEST CONDITIONS		MINIMUM	TYPICAL	MAXIMUM	UNITS
$I_{GS}$	$V_{GS} = 10\text{ V}$	$T_C = 150^\circ\text{C}$			100	$\mu\text{A}$
					100	$\text{nA}$
$I_{DSS}$	$V_{DS} = 15\text{ V}$	$V_{GS} = 0\text{ V}$	0.2		1.5	$\text{mA}$
$V_{GS}$	$V_{DS} = 15\text{ V}$	$I_D = 50\ \mu\text{A}$	0.1		1.0	$\text{V}$
$V_{(P)GS}$	$V_{DS} = 15\text{ V}$	$I_D = 500\ \mu\text{A}$			1.2	$\text{V}$
$ y_{fs} $ $ y_{os} $	$V_{DS} = 15\text{ V}$	$V_{GS} = 0\text{ V}$	1500		10	$\mu\text{S}$
$ y_{fs} $ $ y_{os} $	$V_{DS} = 15\text{ V}$	$I_D = 200\ \mu\text{A}$	500	$f = 1.0\text{ MHz}$	5.0	$\mu\text{S}$
$C_{iss}$ $C_{rs}$	$V_{DS} = 15\text{ V}$	$f = 1.0\text{ MHz}$			5.0	$\text{pF}$
					0.8	
$V_n$	$V_{DS} = 15\text{ V}$	$I_D = 200\ \mu\text{A}$	$\text{BW} = 0.6\text{ to }100\text{ Hz}$		500	$\text{nV}$