New Jersey Semi-Conductor Products, Inc.

20 STERN AVE.
SPRINGFIELD, NEW JERSEY 07081
U.S.A.

TELEPHONE: (973) 376-2922
(212) 227-6005
FAX: (973) 376-8960

IFN860

Dual N-Channel Silicon Junction Field-Effect Transistor

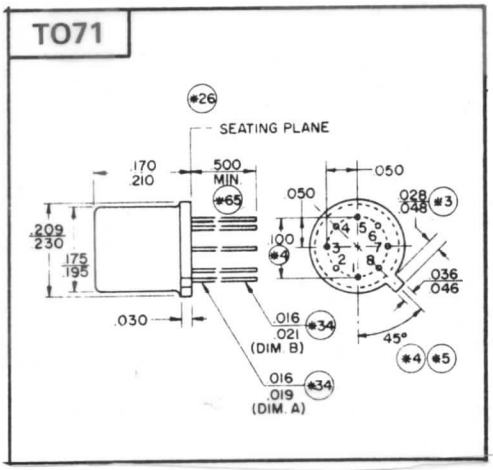
- Low-Noise Audio Amplifier
- Equivalent to Crystalonics CD860

Absolute maximum ratings at T_A = 25°C

Reverse Gate Source & Reverse Gate Drain Voltage	– 20 V
Continuous Forward Gate Current	50 mA
Continuous Device Power Dissipation	400 mW
Power Derating	2.3 mW/°C
Storage Temperature Range	– 65°C to 200°C

At 25°C free air temperature:		IFN860			Process NJ450L		
Static Electrical Characteristics		**Min**	**Typ**	**Max**	**Unit**	**Test Conditions**	
Gate Source Breakdown Voltage	$V_{(BR)GSS}$	– 20			V	I_G = – 1 µA, V_{DS} = ØV	
Gate Reverse Leakage Voltage	I_{GSS}			3	nA	V_{GS} = – 10V, V_{DS} = ØV	
Gate Source Cutoff Voltage	$V_{GS(OFF)}$	– 0.3		– 3	V	V_{DS} = 10V, I_D = 100 µA	
Drain Saturation Current (Pulsed)	I_{DSS}	10			mA	V_{DS} = 10V, V_{GS} = Ø V	
Differential Gate Source Voltage	$\lvert V_{GS1} - V_{GS2} \rvert$			25	mV	V_{DS} = 10V, I_D = 100 µA	
Dynamic Electrical Characteristics							
Transconductance	g_m	25	40		mS	V_{DS} = 10V, I_D = – 10 mA	f = 1 kHz
Common Source Input Capacitance	C_{iss}		30	35	pF	V_{DS} = 10V, I_D = – 10 mA	f = 1 MHz
Common Source Reverse Transfer Capacitance	C_{rss}		17	20	pF	V_{DS} = 10V, I_D = – 10 mA	f = 1 MHz
Equivalent Short Circuit Input Noise Voltage	$\bar{e}_N$			2	nV/√Hz	V_{DG} = 3V, I_D = 10 mA	f = 1 kHz

TO71



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