

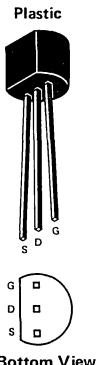
n-channel JFET designed for . . .

MPF112
Performance Curves NRL
 See Section 4

- VHF/UHF Amplifiers
- Mixers
- Oscillators

BENEFITS

- Low Cost
- Automatic Insertion Package

 TO-92
 See Section 6

ABSOLUTE MAXIMUM RATINGS (25°C)

Drain-Gate Voltage	25 V
Source-Gate Voltage	25 V
Drain-Source Voltage.....	25 V
Forward Gate Current.....	10 mA
Total Device Dissipation at 25°C Ambient (Derate 3.27 mW/°C).....	360 mW
Operating Temperature Range.....	-55 to 135°C
Storage Temperature Range.....	-55 to 150°C
Lead Temperature Range (1/16" from case for 10 seconds)	300°C

ELECTRICAL CHARACTERISTICS (25°C unless otherwise noted)

Characteristic		Min	Typ	Max	Unit	Test Conditions	
1	I _{GSS}	Gate Reverse Current		-0.01	nA	V _{GS} = -10 V, V _{DS} = 0	
2	S T	BV _{GSS}	-25		V	I _G = -10 μA, V _{DS} = 0	
3	A T	V _{GS(off)}	-0.5		-10.0	V _{DS} = 10 V, I _D = 1 μA	
4	I C	I _{DSS}	1		25	mA	V _{DS} = 10 V, V _{GS} = 0, (Note 1)
5	g _{fs}	Common-Source Forward Transconductance	1000		7500	μmho	f = 1 kHz
6	R _{e(y_{fs})}	Common-Source Forward Transconductance	800				f = 100 MHz
7	D Y N	C _{ISS}		3.5		pF	
8	C _{rss}	Common-Source Reverse Transfer Capacitance		0.85			f = 1 MHz

NOTE:

1. Pulse test PW = 300 μs, duty cycle ≤ 3%.

NRL