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With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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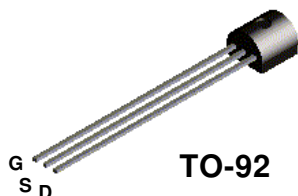
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MPF102



N-Channel RF Amplifier

This device is designed for electronic switching
Applications such as low ON resistance analog switching.
Sourced from Process 50.

Absolute Maximum Ratings * TA=25 degree C unless otherwise noted

Symbol	Parameter	Value	Units
V _{DG}	Drain-Gate Voltage	25	V
V _{GS}	Gate-Source Voltage	-25	V
I _{GF}	Forward Gate Current	10	mA
T _J , T _{stg}	Operating and Storage Junction Temperature Range	-55 to + 155	degree C

* This ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

NOTES :

- 1) These rating are based on a maximum junction temperature of 150 degrees C.
- 2) These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

Thermal Characteristics TA = 25 degrees C unless otherwise noted.

Symbol	Characteristic	Max	Units
P _D	Total Device Dissipation	350	mW
	Derate above 25 degrees C	2.8	mW/degrees C
R _{θJC}	Thermal Resistance, Junction to Case	125	degrees C/W
R _{θJA}	Thermal Resistance, Junction to Ambient	357	degrees C/W

* Device mounted on FR-4 PCB 1.5" X 1.6" X 0.06"

N-Channel RF Amplifier

(Continued)

Electrical Characteristics TA= 25 degrees C unless otherwise noted

Symbol	Parameter	Test Conditions	Min	Typ	Max	Units
OFF CHARACTERISTICS						
$V_{(BR)GSS}$	Gate-Source Breakdown Voltage	$I_G = -1.0\mu A, V_{DS} = 0$	-25			V
I_{GSS}	Gate Reverse Current	$V_{GS} = -15V, V_{DS} = 0$			-2.0	nA
$V_{GS(off)}$	Gate-Source Cutoff Voltage	$V_{DS} = 15V, I_D = 2nA$			-8.0	V
V_{GS}	Gate-Source Voltage	$V_{DS} = 15V, I_D = 200\mu A$	-0.5		-7.5	V
ON CHARACTERISTICS						
I_{DSS}	Zero-Gate Voltage Drain Current	$V_{DS} = 15V, V_{GS} = 0$	2.0		20	mA
g_{fs}	Forward Transconductance	$V_{GS} = 0V, V_{DS} = 15V, f = 1kHz.$	2000		7500	μS
Capacitance						
C_{iss}	Common-Source Input Capacitance	$V_{GS} = 15V, V_{DS} = 0V$ $f = 1 MHz.$			7.0	pf
C_{rss}	Common-Source reverse Transfer Capacitance	$V_{GS} = 15V, V_{DS} = 0V$ $f = 1 MHz.$			3.0	pf

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No Identification Needed	Full Production	This datasheet contains final specifications. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
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