imall

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

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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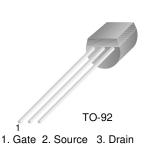
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N-Channel RF Amplifier

- This device is designed for HF/VHF mixer/amplifier and applications where process 50is not adequate. Sufficient gain and low noise for sensitive receivers.
- Sourced from process 90.



Absolute Maximum Ratings* $T_a=25$ °C unless otherwise noted

Symbol	Parameter	Ratings	Units
V _{DG}	Drain-Gate Voltage	30	V
V _{GS}	Gate-Source Voltage	-30	V
I _{GF}	Forward Gate Current	10	mA
T _J , T _{STG}	Operating and Storage Junction Temperature Range	-55 ~ 150	°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 limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

Electrical Characteristics Ta=25°C unless otherwise noted

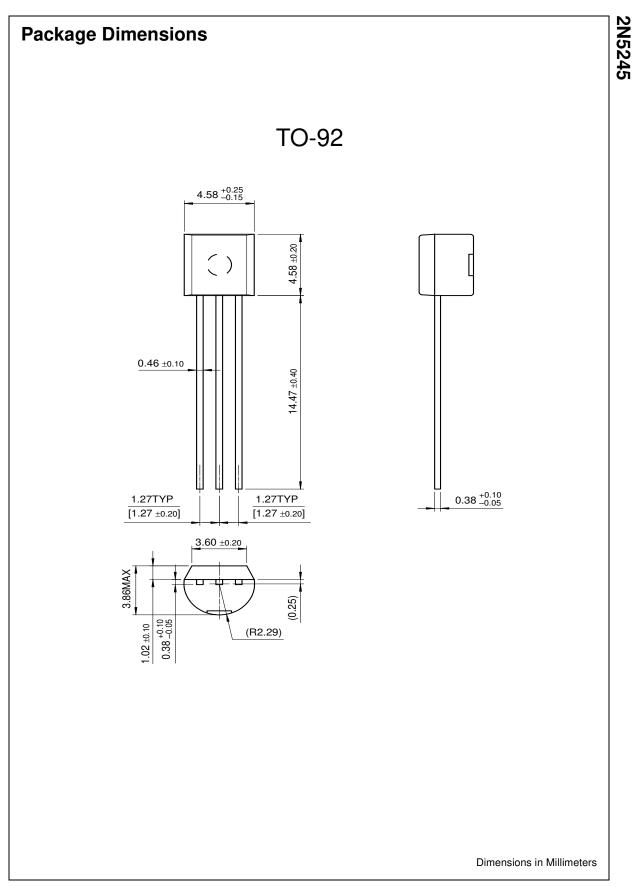
Symbol	Parameter	Test Condition	Min.	Max.	Units
Off Charac	teristics	•		•	•
V _{(BR)GSS}	Gate-Source Breakdwon Voltage	$I_{G} = 1.0 \mu A, V_{DS} = 0$	-30		V
I _{GSS}	Gate Reverse Current	$V_{GS} = 25V, V_{DS} = 0$		-1.0	nA
V _{GS(off)}	Gate-Source Cutoff Voltage	V _{DS} = 15V, I _D = 1.0nA	-1.0	-0.6	V
On Charac	teristics	•		•	•
I _{DSS}	Zero-Gate Voltage Drain Current *	$V_{DS} = 15V, V_{GS} = 0$	5	15	mA
Small Sign	al Characteristics	•		•	•
gfs	Forward Transferconductance	V _{GS} = 0V, V _{DS} = 15V, f = 1.0kHz	4500	11000	μmhos
goss	Common- Source Output Conductance	V _{GS} = 0V, V _{DS} = 15V, f = 1.0kHz		50	μmhos

Pulse Test: Pulse ≤ 300µs

Thermal Characteristics ${\rm T}_a{=}25^{\circ}{\rm C}$ unless otherwise noted

Symbol	Parameter	Max.	Units
PD	Total Device Dissipation	350	mW
	Derate above 25°C	2.8	mW/°C
$R_{\theta JC}$	Thermal Resistance, Junction to Case	125	°C/W
R_{\thetaJA}	Thermal Resistance, Junction to Ambient	357	°C/W

2N5245



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CoolFET™	FRFET™	MicroPak™	QS™	SyncFET™
CROSSVOLT™	GlobalOptoisolator™	MICROWIRE™	QT Optoelectronics [™]	TinyLogic [®]
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EcoSPARK™	HiSeC™	MSXPro™	RapidConfigure™	TruTranslation™
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The Power Franc	hise™	PACMAN™	Stealth™	
Programmable A	ctive Droop™	POP™	SuperFET™	

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Definition of Terms

Datasheet Identification	Product Status	Definition
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Preliminary	First Production	This datasheet contains preliminary data, and supplementary data will be published at a later date. Fairchild Semiconductor reserves the right to make changes at any time without notice in order to improve design.
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.
Obsolete	Not In Production	This datasheet contains specifications on a product that has been discontinued by Fairchild semiconductor. The datasheet is printed for reference information only.