Central Semiconductor Corp.

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Manufacturers of World Class Discrete Semiconductors

2N5949 2N5950 2N5951 2N5952 2N5953

N-CHANNEL FET

T0-92-18R CASE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 2N5949 Series types are Silicon N Channel Junction FETs designed for switching, RF amplifier and mixer applications where low capacitance is desired.

 $\underline{\text{MAXIMUM RATINGS}}$ (TA=25°C unless otherwise noted)

	SYMBOL	UNIT	
Gate-Source Voltage	VGS	30	V
Drain-Gate Voltage	V _{DG}	30	V
Gate Current	l G	10	mA
Power Dissipation	P _D	360	mW
Operating and Storage Junction Temperature	TJ, Tstq	-65 TO +150	°C

ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

		2N5	949	2N5	950	2N5	951	2N5	952	2N5	953	
SYMBOL	TEST CONDITIONS	MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	MIN	XAM	UNIT
IGSS	V _G S=15V		1.0		1.0		1.0		1.0		1.0	nA
IGSS	$V_{GS}=15V$, $T_{A}=100^{\circ}C$		200		200		200		200		200	nΑ
¹ DSS	VDS=15V	12	18	10	15	7.0	13	4.0	8.0	2.5	5.0	mΑ
BV_{GSS}	IG=1.0μA	30		30		30		30		30		V
VGS	VDS=15V, ID=1.2mA	2.25	6.0	-	-	-	-	-	-	-	-	٧
VGS	VDS=15V, ID=1.0mA	-	-	1.8	5.0	-	-	-	-	_	-	٧
VGS	VDS=15V, ID=0.7mA	-	-	-	_	1.3	4.5	-	-	-	_	٧
VGS	VDS=15V, ID=0.4mA	-	-	-	-	-	-	0.75	3.0	-	-	٧
VGS	VDS=15V, ID=0.25mA	-	-	-	-	-	-	-	-	0.5	2.5	٧
VGS(OFF)	VDS=15V, ID=100nA	3.0	7.0	2.5	6.0	2.0	5.0	1.3	3.5	0.8	3.0	V
Yfs	VDS=15V, VGS=0, f=1.0kHz	3.5	7.5	3.5	7.5	3.5	6.5	2.0	6.5	2.0	6.5	mmho
Yos	VDS=15V, VGS=0, f=1.0kHz		75		75		75		50		50	μmho
Ciss	$V_{DS}=15V$, $V_{GS}=0$, $f=1.0MHz$		6.0		6.0		6.0		6.0		6.0	рF
Crss	VDS=15V, VGS=0, f=1.0MHz		2.0		2.0		2.0		2.0		2.0	рF
rds(ON)	VGS=0, $ID=0$, $f=1.0kHz$		200		210		250		300		375	Ω
9is	VDS=15V, VGS=0, f=100MHz		250		250		250		250		250	μmho
9fs	V _{DS} =15V, V _{GS} =0, f=100MHz	3.0	7.5	3.0	7.5	3.0	6.5	1.0	6.5	1.0	6.5	mmho
9os	VDS=15V, VGS=0, f=100MHz		150		125		100		75		50	μmho
NF	VDS=15V, VGS=0, f=100MHz, RG=1		5.0		5.0		5.0		5.0		5.0	dB
NF	VDS=15V, VGS=0, f=1.0kHz, RG=1	Ω MO.	2.0		2.0		2.0		2.0		2.0	dB
۷N	$V_{DS}=15V$, $V_{GS}=0$, $f=1.0kHz$		100		100		100		100		100	nV/√Hz

OUTSTANDING SUPPORT AND SUPERIOR SERVICES



PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- · Inventory bonding
- · Consolidated shipping options

- · Custom bar coding for shipments
- · Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free guick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- · Custom electrical curves
- · Environmental regulation compliance
- · Customer specific screening
- · Up-screening capabilities

- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- · Application and design sample kits
- Custom product and package development

REQUESTING PRODUCT PLATING

- 1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
- 2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

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