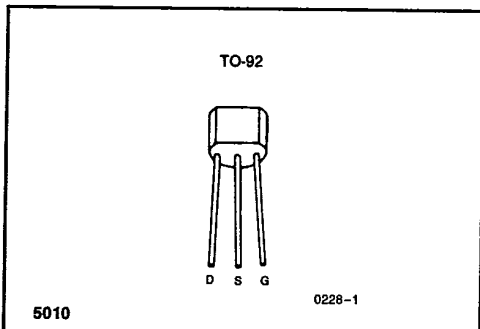


2N5457-2N5459**N-Channel JFET****General Purpose Amplifier/Switch**

T-29-27

2N5457-2N5459

PIN CONFIGURATION**ABSOLUTE MAXIMUM RATINGS**(T_A = 25°C unless otherwise noted)

Drain-Gate Voltage	25V
Drain-Source Voltage	25V
Continuous Forward Gate Current	10mA
Storage Temperature Range	-65°C to +150°C
Operating Temperature Range	-55°C to +135°C
Lead Temperature (Soldering, 10sec)	+300°C
Power Dissipation	310mW
Derate above 25°C	2.82mW/°C

NOTE: Stresses above those listed under "Absolute Maximum Ratings" may cause permanent damage to the device. These are stress ratings only and functional operation of the device at these or any other conditions above those indicated in the operational sections of the specifications is not implied. Exposure to absolute maximum rating conditions for extended periods may affect device reliability.

ORDERING INFORMATION

TO-92
2N5457
2N5458
2N5459

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise specified)

Symbol	Parameter	Test Conditions	Min	Max	Units
BV _{GSS}	Gate-Source Breakdown Voltage	I _G = -10μA, V _{DS} = 0	-25		V
I _{GSS}	Gate Reverse Current	V _{GS} = -15V, V _{DS} = 0		-1.0	nA
		V _{GS} = -15V, V _{DS} = 0, T _A = 100°C		-200	
V _{GS(off)}	Gate-Source Cutoff Voltage	V _{DS} = 15V, I _D = 10nA	-0.5	-6.0	V
			-1.0	-7.0	
			-2.0	-8.0	
V _{GS}	Gate-Source Voltage	V _{DS} = 15V, I _D = 100μA			V
		V _{DS} = 15V, I _D = 200μA			
		V _{DS} = 15V, I _D = 400μA			
I _{DSS}	Zero-Gate-Voltage Drain Current (Note 1)	V _{DS} = 15V, V _{GS} = 0	1.0	5.0	mA
			2.0	9.0	
			4.0	16	
y _{fs}	Forward Transfer Admittance	V _{DS} = 15V, V _{GS} = 0, f = 1kHz	1000	5000	μS
			1500	5500	
			2000	6000	
y _{os}	Output Admittance	V _{DS} = 15V, V _{GS} = 0, f = 1kHz		50	μS
C _{iss}	Input Capacitance (Note 2)	V _{DS} = 15V, V _{GS} = 0, f = 1MHz		7.0	pF
C _{rss}	Reverse Transfer Capacitance (Note 2)	V _{DS} = 15V, V _{GS} = 0, f = 1MHz		3.0	pF
NF	Noise Figure (Note 2)	V _{DS} = 15V, V _{GS} = 0, R _G = 1MΩ BW = 1Hz, f = 1kHz		3.0	dB

NOTES: 1. Pulse test required. PW ≤ 830ms, duty cycle ≤ 10%
2. For design reference only, not 100% tested.

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NOTE: All typical values have been characterized but are not tested.