NEW ENGLAND SEMICONDUCTOR

Technical Data

2N2609 JAN

POWER MOSFET
P CHANNEL

MIL-PRF
QPL
DEVICES

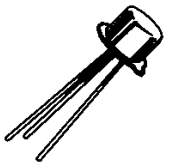
Processed per MIL-PRF-19500/296

…DESIGNED FOR GENERAL PURPOSE SMALL SIGNAL SWITCHING AND AMPLIFIER APPLICATIONS

ABSOLUTE MAXIMUM RATINGS (T_A = 25^{0}C unless otherwise noted)

Parameters / Test Conditions		Symbol	Value	Units
Gate-Source Voltage		V_{GSS}	30	V
Power Dissipation (1)	T_A = 25^{0}C	P_D	300	mW
Operating Junction & Storage Temperature Range		T_{op}, T_{stg}	-65 to +200	^{0}C

(1) Derate linearly, 1.71 mW/^{0}C for T_A = 25^{0}C.



TO-18 (TO-206AA)

ELECTRICAL CHARACTERISTICS (T_A = 25^{0}C unless otherwise noted)

PARAMETERS / TEST CONDITIONS	SYMBOL	MIN.	MAX.	UNITS
Gate-Source Breakdown Voltage V_{DS} = 0, I_G = 1.0 μAdc	$V_{(BR)GSS}$	30		Vdc
Gate Reverse Current V_{DS} = 0, V_{GS} = 30 Vdc V_{DS} = 0, V_{GS} = 15 Vdc	I_{GSS}		30 22.5	ηA
Drain Current V_{GS} = 0, V_{DS} = 5.0 Vdc	I_{DDSS}	-2.0	-10.0	ηA
Gate-Source Cutoff Voltage V_{DS} = 5.0 V, I_D = 1.0 μAdc	$V_{GS(off)}$	0.75	6.0	Vdc
Magnitude of Small-Signal, Common-Source Short-Circuit Forward Transfer Admittance V_{GS} = 0, V_{DS} = 5.0 Vdc, f = 1.0 kHz	$\lvert Y_{fs2} \rvert$	2,000	6,250	μmho
Small-Signal, Common-Source Short-Circuit Input Capacitance V_{GS} = 0, V_{DS} = 5.0 Vdc, f = 1.0 MHz	C_{iss}		10	pF
Common-Source Spot Noise Figure V_{GS} = 0, V_{DS} = 5.0 Vdc, f = 1.0 kHz B_W = 16%, R_G = 1.0 megohms, e_{gen} = 1.82 mVdc,	NF		3.0	dB

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