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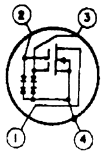
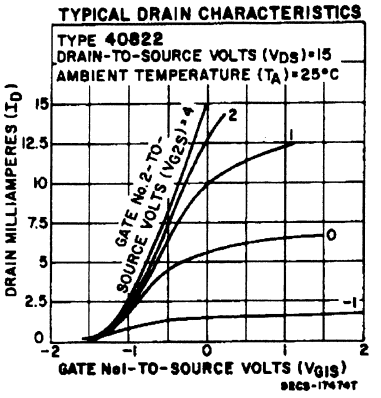
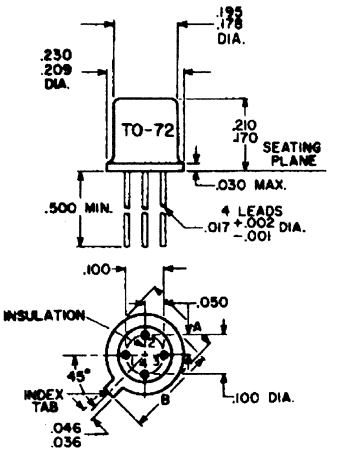


FIELD-EFFECT TRANSISTOR 40822

Si dual insulated-gate field-effect (mos) n-channel depletion type with integrated gate-protection circuits used for rf-amplifier applications in vhf television receivers and other commercial equipment operating at frequencies up to 250 MHz. JEDEC TO-72. **Outline** No.28. This type is identical with type 40820 except for the following items. For typical forward transconductance characteristics curves, refer to type 3N187.





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MAXIMUM RATINGS

Drain-to-Source Voltage	V_{DS}	−0.2 to 18	V
Drain-to-Gate No. 1 Voltage	V_{DG1}	24	V
Drain-to-Gate No. 2 Voltage	V_{DG2}	24	V

CHARACTERISTICS

Gate No. 1-to-Source Cutoff Voltage (V_{DS} = 15 V, I_D = 50 μA, V_{G2S} = 4 V)	V_{G1S}(off)	−2 typ; −4 max	V
Gate No. 2-to-Source Cutoff Voltage (V_{DS} = 15 V, I_D = 50 μA, V_{G1S} = 0)	V_{G2S}(off)	−2 typ; −4 max	V
Zero-Bias Drain Current (V_{DS} = 15 V, V_{G1S} = 0, V_{G2S} = 4 V)	I_{DS}	5 to 30	mA
Small-Signal Input Capacitance† (V_{DS} = 15 V, I_D = 10 mA, V_{G2S} = 4 V, f = 1 MHz)	C_{iss}	6.5 typ; 9.5 max	pF
Power Gain (V_{DS} = 15 V, I_D = 10 mA, V_{G2S} = 4 V, f = 200 MHz)	G_{PS}	19 min; 24 typ	dB
Noise Figure (V_{DS} = 15 V, I_D = 10 mA, V_{G2S} = 4 V, f = 200 MHz)	NF	2 typ; 3.5 max	dB

† Capacitance between gate No. 1 and all other terminals.