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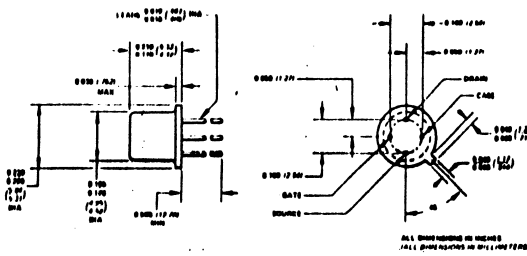
2N3380
P-CHANNEL DIFFUSED SILICON FIELD-EFFECT TRANSISTOR



JEDEC TO-72
Fourth lead is in electrical contact with case.

*ABSOLUTE MAXIMUM RATINGS

Gate-Drain Voltage (Note 1)	30 V
Gate-Source Voltage (Note 1)	30 V
Gate Current	50 mA
Storage Temperature	-65 to +200°C
Total Dissipation at 25°C T_A (Note 2)	300 mW

Note 1: Due to symmetrical geometry, units may be operated with source and drain leads interchanged.

Note 2: Derate linearly to +175°C at 2 mW/°C.

*ELECTRICAL CHARACTERISTICS (25°C unless otherwise noted)

Characteristic		2N3380 Min	2N3380 Max	Unit
r_{DS}	Drain-Source ON Resistance V_{GS} = 0, V_{DS} = 0		600	Ω
V_P	Gate-Source Pinch-Off Voltage V_{DS} = -5 V, I_D = -1 μA	4.0	9.5	V
BV_{GDS}	Gate-Drain Breakdown Voltage I_G = 1 μA, V_{DS} = 0	30		V
$I_{D(OFF)}$	Drain Cutoff Current V_{DS} = -5 V, V_{GS} = ( )		-0.6 (10)	nA V
I_{DSS}**	Drain Current at Zero Gate Voltage V_{DS} = -10 V, V_{GS} = 0	-3.0	-30.0	mA
I_{GSS}	Gate Reverse Current V_{GS} = 30 V, V_{DS} = 0		3	nA
I_{GSS}	Gate Reverse Current V_{GS} = 5 V, V_{DS} = 0, T_A = 150°C		3	μA
g_{fs}**	Small-Signal Common-Source Forward Transconductance V_{DS} = -10 V, V_{GS} = 0, f = 1 kHz	1500	3000	μmho
C_{sgs} + C_{dgs}	Source-Gate Capacitance and Drain-Gate Capacitance V_{DS} = 0, V_{GS} = 10 V, f = 140 kHz		3.0	pF
C_{iss}	Common-Source Input Capacitance V_{DS} = -5 V, V_{GS} = 1 V, f = 140 kHz	5 Typ		

* JEDEC registered data.
**Pulse measurement 0.1 sec period.