

TECHNICAL DATA
DATA SHEET 4305, REV -

HERMETIC P-CHANNEL JFET

- FEATURES:
- 30 V, 75 Ω , 30 mA P-Channel JFET
 - Hermetically Sealed
 - Surface Mount Package: Ceramic LCC-3

MAXIMUM RATINGS

ALL RATINGS ARE AT $T_A = 25^\circ\text{C}$ UNLESS OTHERWISE SPECIFIED.

RATING	SYMBOL	MIN.	TYP.	MAX.	UNITS
GATE TO SOURCE VOLTAGE $I_D = 1\mu\text{A}$, $V_{DS} = 0\text{V}$	V_{GS}	-	-	30	V
SATURATED DRAIN CURRENT $V_{GS} = 0\text{V}$, $V_{DS} = -18\text{V}$	I_{DSS}	-30	-	-90	mA
GATE TO DRAIN BREAKDOWN VOLTAGE	BV_{GD}	-	-	30	V
OPERATING AND STORAGE TEMPERATURE	T_{OP}/T_{STG}	-55	-	+175	$^\circ\text{C}$
TERMAL RESISTANCE JUNCTION TO CASE	$R_{\theta JC}$	-	-	300	$^\circ\text{C}/\text{W}$
TOTAL DEVICE DISSIPATION @ $T_C = 25^\circ\text{C}$	P_D	-	-	0.5	W

ELECTRICAL CHARACTERISTICS

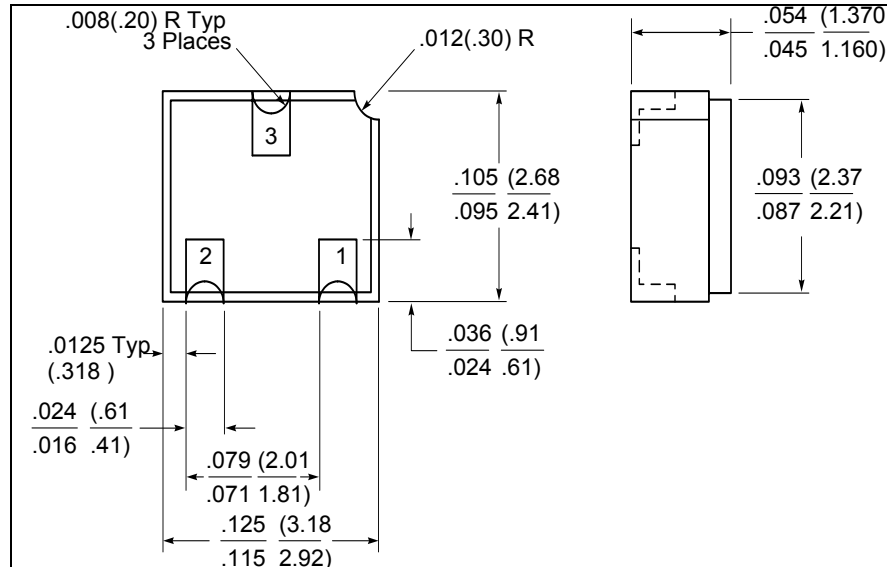
DRAIN TO SOURCE ON STATE RESISTANCE $V_{GS} = 0\text{V}$, $I_D = -1\text{mA}$	$R_{DS(ON)}$	-	-	75	Ω
GATE SOURCE CUT OFF VOLTAGE $V_{DS} = -15\text{V}$, $I_D = -1\text{nA}$	$V_{GS(OFF)}$	-	5	10	V
COMMON SOURCE TRANSCONDUCTANCE $V_{DS} = -15\text{V}$, $I_D = -1\text{mA}$	g_{fs}	-	4.5	-	S(1/ Ω)
DRAIN CUT OFF CURRENT, $V_{DS} = -15\text{V}$, $V_{GS} = 12\text{V}$ $T_A = 25^\circ\text{C}$ $T_A = 125^\circ\text{C}$	$I_{D(OFF)}$	-	- 10 - 0.02	- 500 - 1	pA μA
GATE REVERSE CURRENT $V_{GS} = 20\text{V}$ $T_A = 125^\circ\text{C}$	I_{GSS}	-	5 0.01	500 1	pA μA
TURN ON DELAY TIME RISE TIME TURN OFF DELAY TIME FALL TIME $V_{DD} = -10\text{V}$, $I_D = -15\text{mA}$, $R_G = 100\Omega$, $V_{GS} = 20\text{V}$	$t_{d(ON)}$ t_r $t_{d(OFF)}$ t_f	-	6 10 6 15	-	ns
GATE SOURCE FORWARD VOLTAGE $I_G = -1\text{mA}$ $V_{DS} = 0\text{V}$	$V_{GS(F)}$	-	- 0.7	- 1	V
INPUT CAPACITANCE $V_{GS} = 0\text{V}$, $V_{DS} = -15\text{V}$, $f = 1\text{MHz}$	C_{iss}	-	20	25	pF
REVERSE TRANSFER CAPACITANCE $V_{GS} = 12\text{V}$, $V_{DS} = 0\text{V}$, $f = 1\text{MHz}$	C_{rss}	-	5	7	pF

SENSITRON

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MECHANICAL DIMENSIONS - in inches / mm

**LCC-3**

PINOUT TABLE

DEVICE TYPE	PIN 1	PIN 2	PIN 3
P Channel JFET	Gate	Source	Drain

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