

TECHNICAL DATA
DATA SHEET 4975, REV. -

**HERMETIC POWER MOSFET
N-CHANNEL**

DESCRIPTION: A 600 VOLT, 44 AMP, 0.15 $R_{DS(ON)}$ MOSFET IN A HERMETIC TO-267 PACKAGE.

MAX. RATINGS / ELECTRICAL CHARACTERISTICS

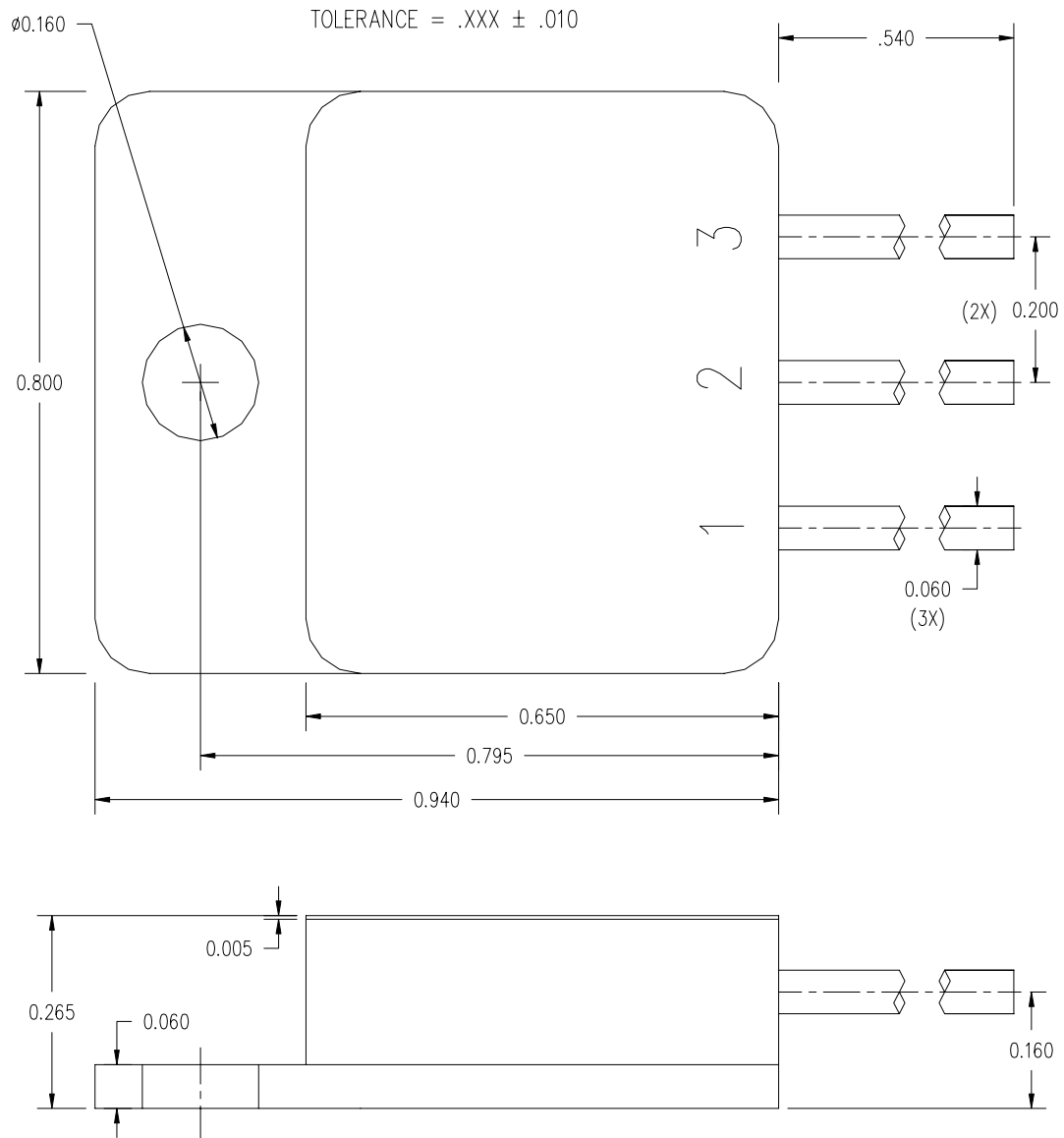
(AT $T_J=25^{\circ}\text{C}$ UNLESS OTHERWISE SPECIFIED).

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS
DRAIN TO SOURCE BREAKDOWN VOLTAGE ($V_{GS} = 0\text{ V}$, $I_D = 1.0\text{ mA}$)	BV_{DSS}	600	-	-	Volts
DRAIN TO SOURCE ON STATE RESISTANCE ($V_{GS} = 10\text{ V}$, $I_D = 22.0\text{ A}$)	$R_{DS(ON)}$	-	-	0.15	Ω
CONTINUOUS DRAIN CURRENT ($V_{DS} = 10\text{ V}$, $T_C = 25^{\circ}\text{C}$)	I_D	-	-	44	Amps
GATE THRESHOLD VOLTAGE ($V_{DS} = V_{GS}$, $I_D = 250\mu\text{A}$)	$V_{GS(th)}$	2.5	-	4.5	Volts
FORWARD TRANSCONDUCTANCE ($V_{DS}=10\text{V}$, $I_{DS} = 22.0\text{A}$)	g_{fs}	-	45	-	$\text{S}(1/\Omega)$
ZERO GATE VOLTAGE DRAIN CURRENT ($V_{DS} = 600\text{V}$, $V_{GS} = 0\text{V}$) ($T_J=125^{\circ}\text{C}$)	I_{DSS}	- -	- -	100 2	μA mA
GATE TO SOURCE LEAKAGE ($V_{GS} = \pm 20\text{V}_{DC}$, $V_{DS} = 0$)	I_{GSS}	-	-	+/- 100	nA
TOTAL GATE CHARGE ($V_{GS} = 10\text{V}$, $V_{DS} = 300\text{V}$, $I_D = 22.0\text{A}$)	Q_g	-	330	-	nC
INPUT CAPACITANCE OUTPUT CAPACITANCE REVERSE TRANSFER CAPACITANCE ($V_{GS} = 0\text{V}$, $V_{DS} = 25\text{V}$, $f = 1.0\text{ MHz}$)	C_{iss} C_{oss} C_{rss}	- - -	8900 1000 330	- - -	pF

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**TECHNICAL DATA
DATA SHEET 4975, REV. -****SOURCE-DRAIN DIODE RATINGS AND CHARACTERISTICS**

PARAMETER	SYMBOL	MIN	TYP	MAX	UNITS
DIODE FORWARD VOLTAGE ($I_S = 22A$, $V_{GS} = 0V$)	V_{SD}	-	-	1.3	Volts
DIODE REVERSE RECOVERY TIME ($I_F = 22A$, $di/dt = 100 A/\mu s$, $V_R = 100V$)	t_{rr}	-	-	250	ns
DIODE REVERSE RECOVERY CURRENT ($I_F = 22A$, $di/dt = 100 A/\mu s$, $V_R = 100V$)	I_{RM}	-	8	-	A
DIODE REVERSE RECOVERY CHARGE ($I_F = 22A$, $di/dt = 100 A/\mu s$, $V_R = 100V$)	Q_{RR}	-	1.4	-	μC

SENSITRON**TECHNICAL DATA
DATA SHEET 4975, REV. -****MECHANICAL DIMENSIONS: Inches / mm****TO-267****PINOUT TABLE**

DEVICE TYPE	PIN 1	PIN 2	PIN 3
MOSFET	DRAIN	SOURCE	GATE
TO-267 PACKAGE			

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