

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

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

**SENSITRON**

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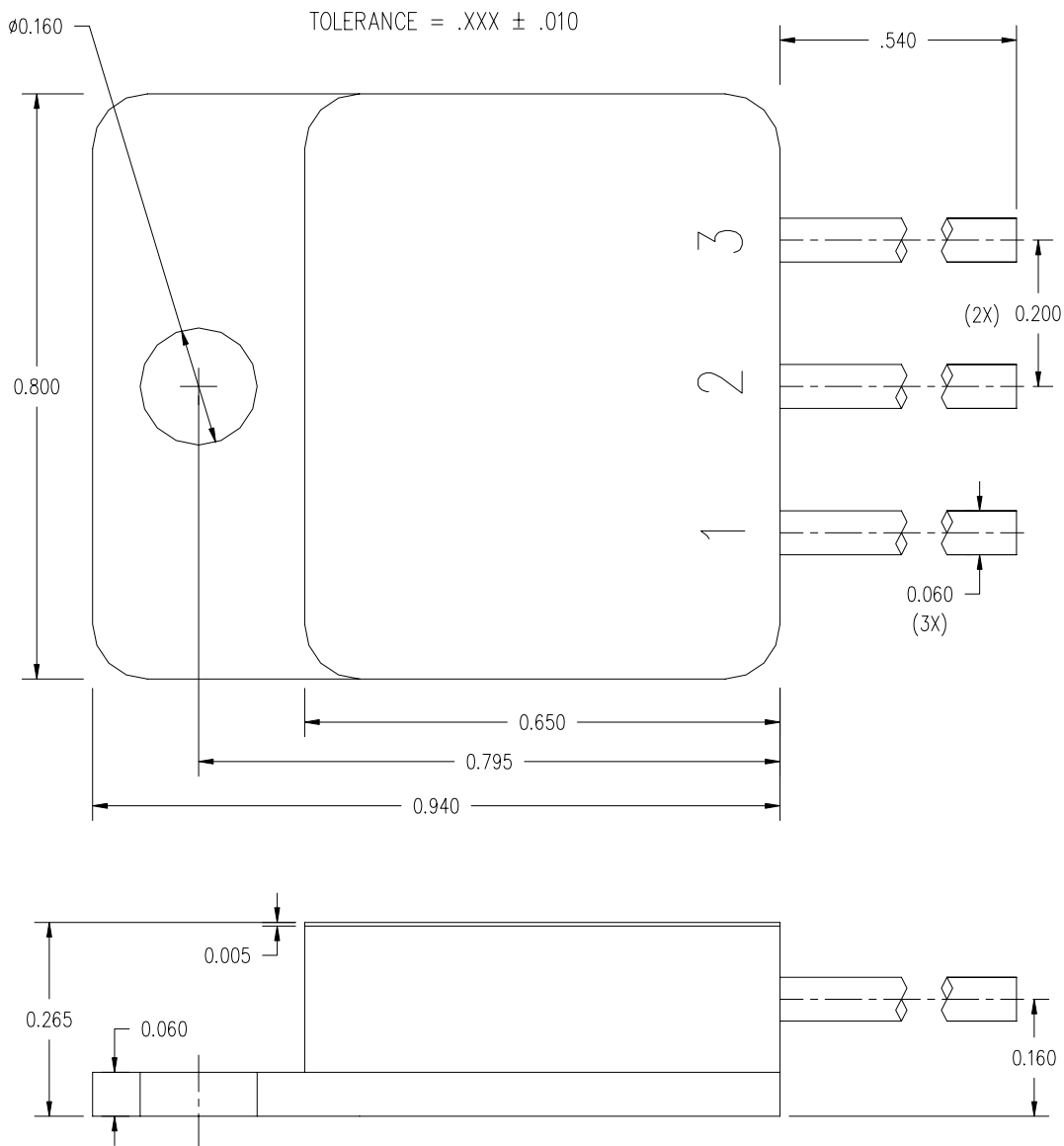
**SOURCE-DRAIN DIODE RATINGS AND CHARACTERISTICS**

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	-	$\mu C$

**SENSITRON**

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**MECHANICAL DIMENSIONS: Inches / mm**



**TO-267**

**PINOUT TABLE**

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

**SENSITRON**

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