

TECHNICAL DATA
DATA SHEET 4064, REV. -
Formerly part number SHD2187

HERMETIC POWER MOSFET N-CHANNEL

FEATURES:

- 900 Volt, 1.6-Ohm, 6.7A MOSFET
- Hermetic Package
- Fast Switching
- Low $R_{DS(on)}$

MAXIMUM RATINGS

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

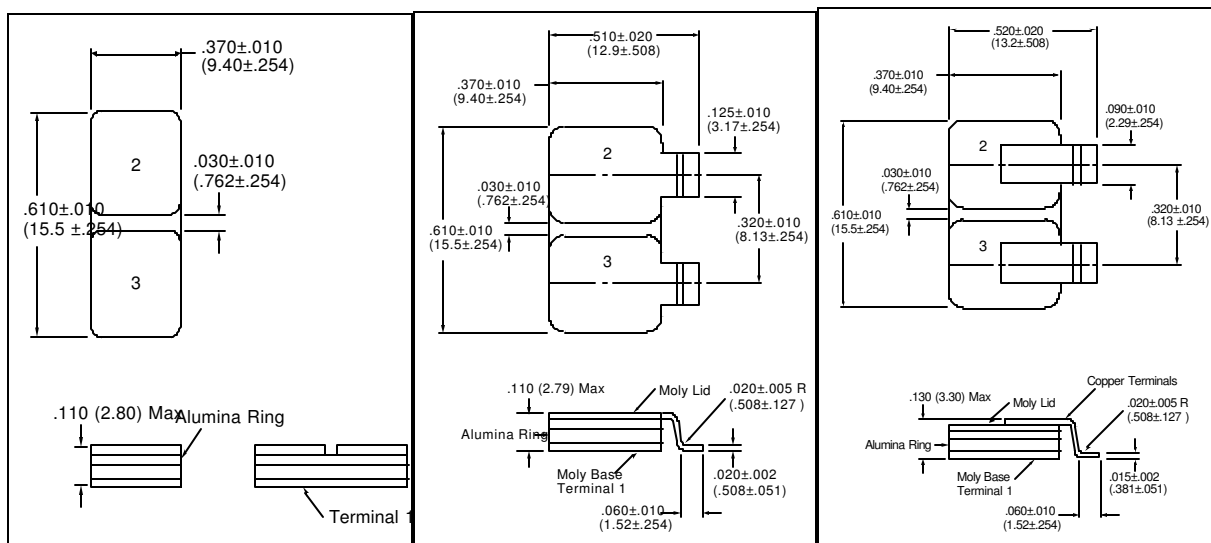
RATING	SYMBOL	MIN.	TYP.	MAX.	UNITS
GATE TO SOURCE VOLTAGE	V_{GS}	-	-	± 20	Volts
ON-STATE DRAIN CURRENT	I_D	-	-	6.7	Amps
PULSED DRAIN CURRENT	I_{DM}	-	-	27	Amps
OPERATING AND STORAGE TEMPERATURE	T_J/T_{STG}	-55	-	+150	$^\circ\text{C}$
TOTAL DEVICE DISSIPATION	P_D	-	-	160	Watts

ELECTRICAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNITS
DRAIN TO SOURCE BREAKDOWN VOLTAGE $V_{GS} = 0V, I_D = 250 \mu A$	BV_{DSS}	1000	-	-	Volts
STATIC DRAIN TO SOURCE ON STATE RESISTANCE $V_{GS} = 10V, I_D = 4.0A$	$R_{DS(ON)}$	-	-	1.6	Ω
GATE THRESHOLD VOLTAGE $V_{DS} = V_{GS}, I_D = 250 \mu A$	$V_{GS(th)}$	2.0	-	4.5	Volts
FORWARD TRANSCONDUCTANCE $V_{DS} = 100V, I_D = 4.0A$	g_{fs}	4.9	-	-	$S(1/\Omega)$
ZERO GATE VOLTAGE DRAIN CURRENT $V_{DS} = 0.8 \times \text{Max. rating}, V_{GS} = 0V, T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$	I_{DSS}	-	-	100 500	μA
GATE TO SOURCE LEAKAGE FORWARD GATE TO SOURCE LEAKAGE REVERSE $V_{GS} = 20V$ $V_{GS} = -20V$	I_{GSS}	-	-	100 -100	nA
TURN ON DELAY TIME RISE TIME 6.7A TURN OFF DELAY TIME FALL TIME 6.2 Ω	$t_{d(ON)}$ t_r $t_{d(OFF)}$ t_f	-	20 34 130 37	-	nsec
DIODE FORWARD VOLTAGE $I_S = 6.7A, V_{GS} = 0V$ Pulse test, $t \leq 300 \mu s$, duty cycle $d \leq 2\%$	V_{SD}	-	-	1.8	Volts
REVERSE RECOVERY TIME $T_J = 25^\circ\text{C}, I_F = 6.7A, V_{DD} = 100V$	t_{rr}	-	610	920	nsec

100A/ μ sec	di/dt =					
INPUT CAPACITANCE	$V_{GS} = 0 \text{ V}$	C_{iss}	-	2900	-	pF
OUTPUT CAPACITANCE	$V_{DS} = 25 \text{ V}$	C_{oss}		270 92		
REVERSE TRANSFER CAPACITANCE	$f = 1.0\text{MHz}$	C_{rss}				
THERMAL RESISTANCE, JUNCTION TO CASE		R_{thJC}	-	-	0.75	$^{\circ}\text{C/W}$

MECHANICAL DIMENSIONS: in Inches / mm



SHD-5

SHD-5A

SHD-5B

PINOUT TABLE

DEVICE TYPE	PIN 1	PIN 2	PIN 3
MOSFET	DRAIN	SOURCE	GATE
SHD-5/A/B PACKAGE			

TECHNICAL DATA

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