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	°C
TOTAL DEVICE DISSIPATION	P_{D}	-	-	160	Watts

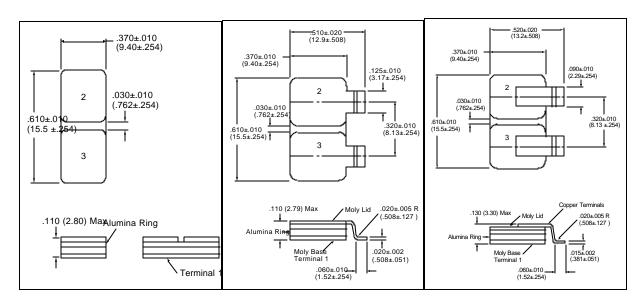
ELECTRICAL CHARACTERISTICS

CHARACTERISTIC	SYMBOL	MIN.	TYP.	MAX.	UNITS
DRAIN TO SOURCE BREAKDOWN VOLTAGE	BV _{DSS}	1000	-	-	Volts
$V_{GS} = 0V, I_{D} = 250$					
μΑ					
STATIC DRAIN TO SOURCE ON STATE RESISTANCE		-	-	1.6	
$V_{GS} = 10V, I_D =$	R _{DS(ON)}				Ω
4.0A					
GATE THRESHOLD VOLTAGE $V_{DS} = V_{GS}$, $I_D = 250 \mu A$	$V_{GS(th)}$	2.0	-	4.5	Volts
FORWARD TRANSCONDUCTANCE	g fs	4.9	-	-	S(1/Ω)
$V_{DS} = 100V, I_{D} =$					
4.0A					
ZERO GATE VOLTAGE DRAIN CURRENT					_
$V_{DS} = 0.8 \text{ x Max. rating}, V_{GS} = 0V, T_{J} = 25^{\circ}C$	I _{DSS}	-	-	100	μΑ
T _J =				500	
125°C				400	A
GATE TO SOURCE LEAKAGE FORWARD $V_{GS} = 20V$ GATE TO SOURCE LEAKAGE REVERSE $V_{GS} = -20V$	I_{GSS}	-	-	100	nA
66	4		20 34	-100	2000
TURN ON DELAY TIME $V_{DD} = 450V$ RISE TIME $I_D = 450V$	t _{d(ON)}	-	20 34 130 37	-	nsec
RISE HIVE ID =	t _r		130 37		
6.7A	$t_{\sf d(OFF)} \ t_{\sf f}$				
TURN OFF DELAY TIME V _{GS} =10V	ļ				
FALL TIME R _G =					
6.2Ω					
DIODE FORWARD VOLTAGE I _S = 6.7A, V _{GS} = 0V	V_{SD}	-	-	1.8	Volts
Pulse test, $t \le 300 \mu s$, duty cycle $d \le 2$					
%					
REVERSE RECOVERY TIME $T_J = 25$ °C,					
$IF=6.7A$, $V_{DD}=$	t _{rr}	-	610	920	nsec
100V					

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

DATA SHEET 4064, REV. -

MECHANICAL DIMENSIONS: in Inches / mm



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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