TECHNICAL DATA DATA SHEET 4068, REV -

HERMETIC POWER MOSFET N-CHANNEL

FEATURES:

- 55 Volt, 0.04 Ohm MOSFET
- Hermetically Sealed
- Add a "C" after the SHD for ceramic seals (SHDC220301)
- Surface Mount Package

MAXIMUM RATINGS

ALL RATINGS ARE AT T_{Δ} = 25°C UNLESS OTHERWISE SPECIFIED.

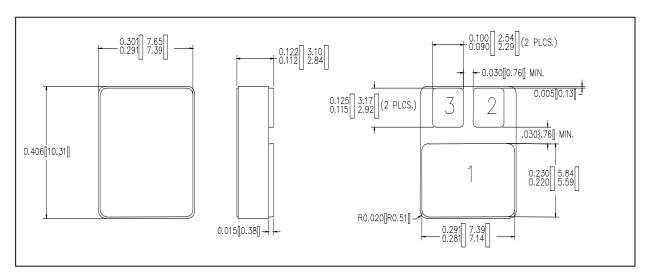
RATING	SYMBOL	MIN.	TYP.	MAX.	UNITS
GATE TO SOURCE VOLTAGE	V_{GS}		-	±20	Volts
CONTINUOUS DRAIN CURRENT V _{GS} = 10V, T _C = 25°C	I _D	-	-	22	Amps
$V_{GS} = 10V, T_{C} = 100^{\circ}C$				16	
PULSED DRAIN CURRENT @ T _C = 25°C	I _{DM}	-	-	88	Amps
OPERATING AND STORAGE TEMPERATURE	T_{OP}/T_{STG}	-55	-	+175	°C
TERMAL RESISTANCE JUNCTION TO CASE	$R_{ ext{ heta}JC}$		-	3.1	°C/W
TOTAL DEVICE DISSIPATION @ T _C = 25°C	P_D		-	40	Watts

ELECTRICAL CHARACTERISTICS

DRAIN TO SOURCE BREAKDOWN VOLTAGE	BV_{DSS}	55	-	-	Volts
$V_{GS} = 0V, I_{D} = 250 \mu A$					
DRAIN TO SOURCE ON STATE RESISTANCE		-	-		Ω
$V_{GS} = 10V, I_{D} = 16A$	R _{DS(ON)}			0.04	
GATE THRESHOLD VOLTAGE $V_{DS} = V_{GS}$, $I_D = 250 \mu A$	$V_{GS(th)}$	2.0	-	4.0	Volts
FORWARD TRANSCONDUCTANCE	g _{fs}	8	-	-	S(1/Ω)
$V_{DS} = V_{GS}$, $I_D = 16A$, ,
ZERO GATE VOLTAGE DRAIN CURRENT, $T_J = 25^{\circ}C$	I_{DSS}	-	-	25	
$(V_{DS} = 55V, V_{GS} = 0V), T_{J} = 125^{\circ}C$				250	μΑ
GATE TO SOURCE LEAKAGE FORWARD V _{GS} = 20V	I_{GSS}	-	-	100	nA
GATE TO SOURCE LEAKAGE REVERSE V _{GS} = -20V				-100	
TOTAL GATE CHARGE $V_{GS} = 10V$,	Q_{g}	-	-	34	
GATE TO SOURCE CHARGE $V_{DS} = 44V$,	Q_gs			7	nC
GATE TO DRAIN CHARGE $I_D = 16A$	Q_{gd}			14	
TURN ON DELAY TIME $V_{DD} = 28V$,	$t_{d(ON)}$	-	-	12	
RISE TIME $I_D = 22A$,	t _r			28	nsec
TURN OFF DELAY TIME $R_G = 13\Omega$,	$t_{d(OFF)}$			30	
FALL TIME $V_{GS} = 10V$	t _f			30	
DIODE FORWARD VOLTAGE $T_J = 25^{\circ}C, I_S = 22A$	V_{SD}	-	-	1.6	Volts
$V_{GS} = 0V$					
REVERSE RECOVERY TIME $T_J = 25$ °C,	t _{rr}	-	57	86	nsec
$I_{S} = 22A$,					
di/dt ≤ 100A/μsec,	_				_
REVERSE RECOVERY CHARGE $V_{DD} \le 25V$	Q_{rr}	-	130	200	μC
INPUT CAPACITANCE $V_{GS} = 0V, V_{DS} = 25V,$	C_{iss}	-	700	-	
OUTPUT CAPACITANCE f = 1.0MHz	C_{oss}		250		pF
REVERSE TRANSFER CAPACITANCE	C_{rss}		100		

DATA SHEET 4068, REV. -

MECHANICAL DIMENSIONS: in Inches / mm



LCC-5

PINOUT TABLE

DEVICE TYPE	PIN 1	PIN 2	PIN 3
N Channel Mosfet	DRAIN	GATE	SOURCE



TECHNICAL DATA

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