

TECHNICAL DATA DATA SHEET 5032, REV. A

HERMETIC POWER MOSFET N-CHANNEL

SHD246723S -- S-100 (JANTX) Screening

FEATURES:

- 60 Volt, 1.6 Ohm, 0.3 A MOSFET
- Isolated Hermetic, Ceramic Package
- Fast Switching
- Low R_{DS (on)}

MAXIMUM RATINGS

ALL RATINGS ARE AT $T_{\rm C}$ = 25°C UNLESS OTHERWISE SPECIFIED.

RATING	SYMBOL	MIN.	TYP.	MAX.	UNITS
DRAIN TO SOURCE VOLTAGE	V_{DS}	-	-	60	Volts
GATE TO SOURCE VOLTAGE	V_{GS}	-	-	±20	Volts
ON-STATE DRAIN CURRENT @ T _C = 25°C	I _{D (on)}	-	-	0.3	Amps
PULSED DRAIN CURRENT @ T _C = 25°C	I _{DM}	-	-	3.0	Amps
OPERATING AND STORAGE TEMPERATURE	T_{OP}/T_{STG}	-55	-	+150	°C
TOTAL DEVICE DISSIPATION @ T _C = 25°C	P _D	-	-	1250	mW
THERMAL RESISTANCE, JUNCTION TO CASE	R_{thJC}	-	-	100	°C/W

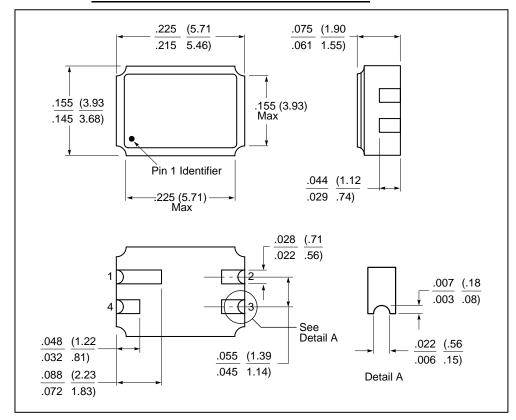
ELECTRICAL CHARACTERISTICS

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DRAIN TO SOURCE BREAKDOWN VOLTAG	jE	BV_{DSS}	60	-	-	Volts
$V_{GS} = 0V$,	$I_D = 0.1 \text{ mA}$					
STATIC DRAIN TO SOURCE ON STATE RE	SISTANCE		-	-		
Pulse width = $300\mu s$, $V_{GS} = 10V$, I	_D = 500mA	$R_{DS(ON)}$			1.6	Ω
Duty cycle \leq 2% $V_{GS} = 5V, I_D$	= 200mA				4.0	
GATE THRESHOLD VOLTAGE V _{DS} = V _{GS} , I _O	$_{\rm D} = 0.25 {\rm mA}$	$V_{GS(th)}$	1.0	•	2.5	Volts
ZERO GATE VOLTAGE DRAIN CURRENT			-	-		
$V_{DS} = 60$	$VV, V_{GS} = 0V$	I_{DSS}			10	μΑ
$V_{DS} = 48V, V_{GS} = 0V$, T _J = 125°C				100	·
GATE TO SOURCE LEAKAGE FORWARD	$V_{GS} = 10V$	I _{GSS}	-	-	200	nA
GATE TO SOURCE LEAKAGE REVERSE	$V_{GS} = -10V$				-200	
	$V_{DS} = 0V$					
TURN ON TIME	$V_{DD} = 30V$,	t _(ON)	-	25	-	
	$I_D = 200 \text{mA},$					nsec
TURN OFF	$V_{GS} = 10V$	t _(OFF)		35	-	
INPUT CAPACITANCE	$V_{GS} = 0 V$,	C _{iss}	-	30	-	
OUTPUT CAPACITANCE	$V_{DS} = 25 V$,	C_{oss}		7		pF
REVERSE TRANSFER CAPACITANCE	f = 1.0MHz	C_{rss}		3		

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MECHANICAL DIMENSIONS: in Inches / mm



LCC-4

PINOUTS

DEVICE TYPE	PIN 1	PIN 2	PIN 3	PIN 4
N-CHANNEL MOSFET IN A	DRAIN	SOURCE	GATE	N/C
LCC-4 CERAMIC PACKAGE				

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