TECHNICAL DATA
DATA SHEET 273, REV. B

12A-Peak Low Side Dual MOSFET Driver
Bipolar/CMOS/DMOS Process

FEATURES:

- **High Peak Output Current - 12A**
- **Wide Operating Range - 4.5V to 18V**
- **Low Supply Current - 450μA w/Logic 1 Input**
- **Low Output Impedance - 1.0Ω, Typical**

MAXIMUM RATINGS (per driver)

RATING	SYMBOL	MIN.	TYP.	MAX.	UNITS
Power Dissipation ($T_A \leq$ 25°C)	-	-	-	1,250	mW
Derating Factors (To Ambient)	-	-	-	10	mW/°C
Storage Temperature	-	-65	-	+150	°C
Lead Temperature (10sec)	-	-	-	300	°C
Supply Voltage	-	-	-	20	Volts
Input Voltage, (to Ground)	-	-5.0V Gnd.	-	V_S+0.3V Gnd.	Volts
Input Current ($V_{IN} > V_S$)	-			50	mA

ELECTRICAL CHARACTERISTICS (per driver)

T_A = 25°C with 4.5V ≤ V_S ≤ 18V otherwise specified.

Logic 1 Input Voltage	V_{IH}	2.4	1.3	-	Volts
Logic 0 Input Voltage	V_{IL}	-	1.1	0.8	Volts
Input Voltage Range	V_{IN}	-5.0	-	V_S +0.3	Volts
Input Current, (0V ≤ V_{IN} ≤ V_S)	I_{IN}	-10	-	10	μA
High Output Voltage	V_{OH}	V_S -0.025	-	-	Volts
Low Output Voltage	V_{OL}	-	-	0.025	Volts
Output Resistance, Output Low, (I_{OUT} = 10mA, V_s = 18V	R_O	-	0.6	1.5	Ohms
Output Resistance, Output High, (I_{OUT} = 10mA, V_s = 18V	R_O	-	0.8	1.5	Ohms
Peak Output Current (V_S = 18V)	I_{PK}	-	12	-	Amps
Latch-Up Protection (Duty Cycle ≤ 2% t ≤ 300μs)	I_R	>1500	-	-	mA
Rise Time, (C_L = 15,000 pF)	t_R	-	20	40	ns
Fall Time, (C_L = 15,000 pF)	t_F	-	24	50	ns
Delay Time	t_{d1}	-	15	30	ns
Delay Time	t_{d2}	-	35	60	ns
Power Supply Current, (V_{IN} = 3.0V) (V_{IN} = 0V)	I_S	- -	0.4 80	1.5 150	mA μA
Operating Input Voltage	V_S	4.5	-	18	Volts

ELECTRICAL CHARACTERISTICS

T_A = -55°C to +125°C with 4.5V ≤ V_S ≤ 18V otherwise specified.

Logic 1 Input Voltage	V_{IH}	2.4	1.4	-	Volts
Logic 0 Input Voltage	V_{IL}	-	1.0	0.8	Volts
Input Voltage Range	V_{IN}	-5.0	-	V_S +0.3	Volts
Input Current, (0V ≤ V_{IN} ≤ V_S)	I_{IN}	-10	-	10	μA
High Output Voltage	V_{OH}	V_S -0.025	-	-	Volts
Low Output Voltage	V_{OL}	-	-	0.025	Volts

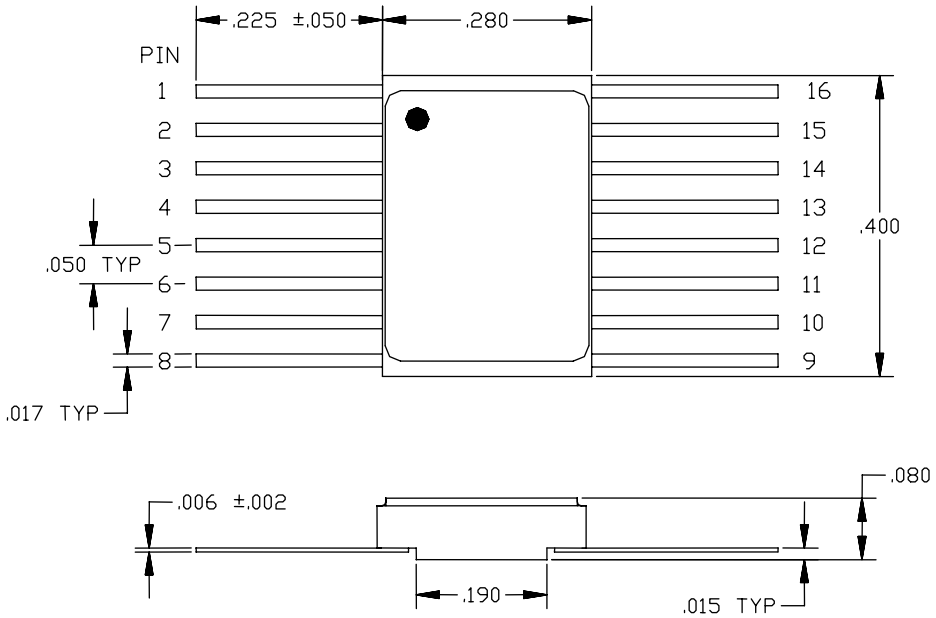
TECHNICAL DATA
DATA SHEET 273, REV. B

ELECTRICAL CHARACTERISTICS (Continued)

T_A = -55°C to +125°C with 4.5V ≤ V_S ≤ 18V otherwise specified.

RATING	SYMBOL	MIN.	TYP.	MAX.	UNITS
Output Resistance, Output Low, (I_{OUT} = 10mA, V_s = 18V)	R_O	-	0.8	2.2	Ohms
Output Resistance, Output High, (I_{OUT} = 10mA, V_s = 18V)	R_O	-	1.3	2.2	Ohms
Rise Time, (C_L = 15,00 pF)	t_R	-	23	50	ns
Fall Time, (C_L = 15,000 pF)	t_F	-	30	60	ns
Delay Time	t_{d1}	-	20	40	ns
Delay Time	t_{d2}	-	40	80	ns
Power Supply Current, (V_{IN} = 3.0V) (V_{IN} = 0V)	I_S	- -	0.6 0.1	3.0 0.4	mA mA
Operating Input Voltage	V_S	4.5	-	18	Volts

MECHANICAL DIMENSIONS: in Inches
Tolerance +/- .010 except where noted



PINOUT TABLE

DEVICE TYPE	Pin- 1	Pin-2	Pin-3	Pin-4	Pin-5	Pin-6	Pin-7	Pin-8	Pin-9	Pin-10
MOSFET CERPACK-16	V_{S1}	Input 1	N/C	Gnd 1	Gnd 2	Output 2	Output 2	V_{S2}	V_{S2}	Input 2
	PIN-11	PIN-12	PIN-13	PIN-14	PIN-15	PIN-16				
	N/C	Gnd 2	Gnd 1	Output 1	Output 1	V_{S1}	-	-	-	-

TECHNICAL DATA
DATA SHEET 273, REV. B

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