<u>SENSITRON</u> SEMICONDUCTOR

TECHNICAL DATA DATA SHEET SCP-6141, REV. – ITAR Controlled Component

24V, 2A RELAY/SOLENOID DRIVER

FEATURES

- HERMETIC PACKAGE (THROUGH-HOLE OR SMT DIP)
- -55°C TO 125°C OPERATION
- MIL-STD-883 SCREENING AVAILABLE
- MIL-PRF-38534 CLASS H LEVEL DESIGN
- SELF-RESETTING SHORT CIRCUIT PROTECTION
- COMMAND AND INHIBIT HCMOS INPUT CONTROL PINS
- OPEN AND SHORT STATUS HCMOS OUTPUT PINS.
- OUTPUT PROTECTION FOR INDUCTIVE KICKBACK

MAXIMUM RATINGS

Parameter	Conditions		Maximum	Units
Input Voltage	-	-	32	Vdc
Operating Temperature Range	-	-	-55 to +150	°C
Storage Temperature Range	-	-	-65 to +150	°C
Short circuit duration	-	-	indefinite	

ELECTRICAL CHARACTERISTICS

All ratings are at $T_C = 25^{\circ}C$ unless otherwise specified.

Symbol	Parameter	Conditions	Min.	Max.	Units
Vin	Supply Voltage		18	32	V
VinL	input logic low			0.8	V
VinH	input logic high		3.4	5.5	V
VoutL	ouput logic low			0.4	V
VoutH	output logic high		4.0		V
tr	rise time			20	μs
tf	fall time			20	μs
Ishort	short circuit current		3.0	4.0	А
Vdrop	Voltage drop			0.6	V

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TRUTH TABLE

INH_	CMD_	LOAD	VOUT	OPEN	SHORT
0	0	OPEN	*	1	0
0	0	NORMAL	0	0	0
0	0	SHORT	0	0	0
0	1	OPEN	*	1	0
0	1	NORMAL	0	0	0
0	1	SHORT	0	0	0
1	0	OPEN	Vin	0	0
1	0	NORMAL	Vin	0	0
1	0	SHORT	0	0	1
1	1	OPEN	*	1	0
1	1	NORMAL	*	0	0
1	1	SHORT	0	0	0

*Floating output condition. The output current is limited to 1mA to provide for open circuit sensing when inactive.

BLOCK DIAGRAM



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PINOUT TABLE

PIN	FUNCTION		
1	Vout		
2	Vout		
3	Vout		
4	CMD_INPUT		
5	INH_INPUT		
6	GND		
7	GND		
8	GND		
9	NC		
10	NC		
11	NC		
12	SHORT STATUS		
13	OPEN STATUS		
14	Vin		
15	Vin		
16	Vin		

MECHANICAL DIMENSIONS* (inches) : (tolerance +/- 0.005 unless otherwise specified)



*Surface mount package shown. Through-hole DIP available. Consult factory. Leads available with gold termination or Pb-Sn hot solder dip.

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