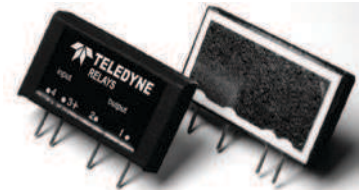


**FEATURES/BENEFITS**

- Slim compact design
- Heatsinking capabilities
- Integrated voltage protection
- High surge handling capability
- MOSFET output



**Part Number Description**

LS60DC10C-21 10A, 36 Vdc

LS60DC10F-21 10A, 36 Vdc

**Part Number Explanation**

**LS**      **60**      **DC**      **10**      **C**      **-21**  
 Series      Peak Voltage<sup>1</sup>      Switch Type<sup>2</sup>      Output Current – Amps      Control Range<sup>3</sup>      Feature<sup>4</sup>

**NOTES**

- 1) Peak Voltage (peak): 60 = 60 Vdc
- 2) Switch Type: DC = Random turn-on (DC)
- 3) Control Range: C = 3–10 Vdc; F = 7–30 Vdc
- 4) Feature: -21 = self turn-on voltage protection (transil)

**ELECTRICAL SPECIFICATIONS**

(+20°C ambient temperature unless otherwise specified)

**INPUT (CONTROL) SPECIFICATIONS**

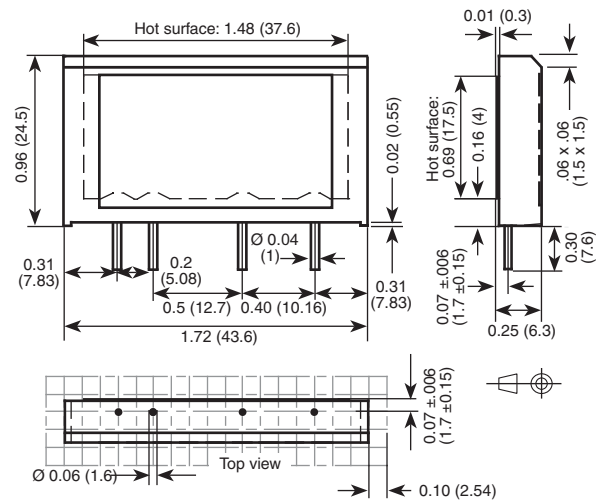
	Min	Max	Units
Control Range			
LS60DC10C	3	10	Vdc
LS60DC10F	7	30	Vdc

Input Current Range	Min	Max	Units
LS60DC10C	7	32	mA
LS60DC10F	6	29	mA

Must Turn-Off Voltage	Min	Units
All relays	1	Vdc

Input Resistance (Typical)	Min	Max	Units
LS60DC10C		270	Ohms
LS60DC10F		1000	Ohms

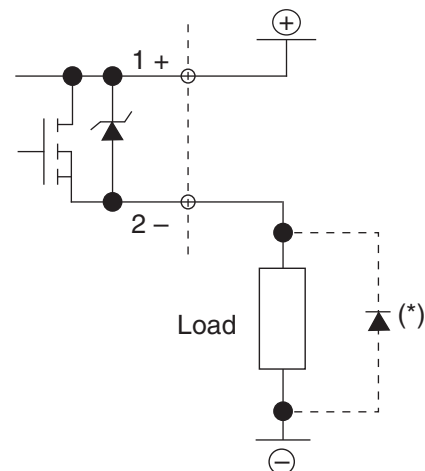
**MECHANICAL SPECIFICATION**



Tolerances: ±0.007 (±0.2)  
Weight: 0.53 oz. (15g)  
Dimensions in inches (millimeters)

Figure 1

**BLOCK DIAGRAM**



\*On inductive loads = Suppressed diode

Figure 2

**ELECTRICAL SPECIFICATIONS**

(+20°C ambient temperature unless otherwise specified)

**OUTPUT (LOAD) SPECIFICATIONS**

	Min	Max	Units
Operating Range	7	36	Vdc
Peak Voltage		60	Vpeak
Output Current Range	.0001	10	A
Clamping Voltage by Transil		40V@1mA	V
		58.1V@10.3A	V
Maximum Energy for Transil 1ms		600	W
Maximum Power for Transil		0.5	W
Maximum Surge Current Rating (10ms)		100	A
On-State Resistance (Rds-ON)		20	mOhms
On-State Voltage Drop		0.2	V
Off-State Leakage Current		0.1	mA
Turn-On Time		10	µs
Turn-Off Time		150	µs
Operating Frequency Range		**	Hz

\*\* For switching frequencies greater than 1Hz, you may need to reduce the current. For more information, contact our technical department.

**GENERAL SPECIFICATIONS**

(+20°C ambient temperature unless otherwise specified)

**ENVIRONMENTAL SPECIFICATIONS**

	Min	Max	Units
Operating Temperature	-40	+80	°C
Storage Temperature	-40	+120	°C
Input-Output Isolation	2500		Vrms
Input, Output, Case Isolation	2500		Vrms
Rated Impulse Voltage	2500		V

**BLOCK DIAGRAM**

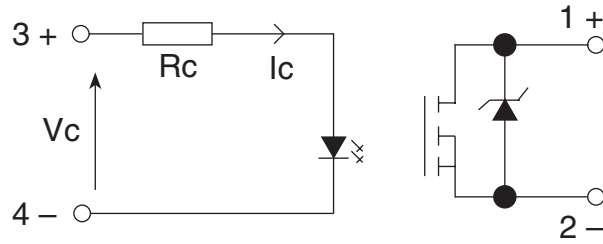


Figure 3

**THERMAL CHARACTERISTICS**

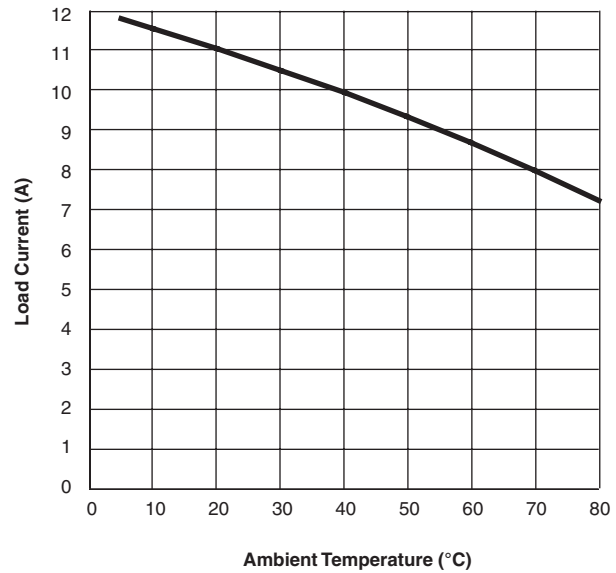


Figure 4