TELEDYNE RELAYS

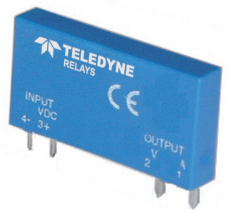
A Unit of Teledyne Electronics and Communications

NEW Series SDS

Output to 4A, 48 Vdc
Slim DC Solid-State Relay

FEATURES/BENEFITS

- Slim compact DC design
- Range for printed circuit board
- Integrated voltage clamp
- High surge handling capabilities



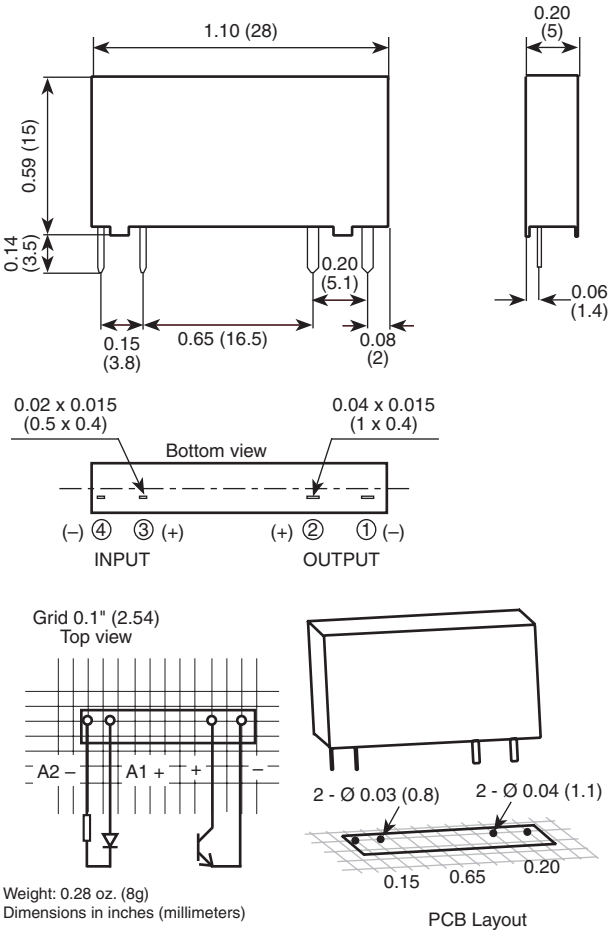
Part Number	Description
SDS32R4A	4A, 32 Vdc
SDS32R4C	4A, 32 Vdc
SDS32R4K	4A, 32 Vdc
SDS60R2A	2.5A, 60 Vdc
SDS60R2C	2.5A, 60 Vdc
SDS60R2K	2.5A, 60 Vdc

Part Number Explanation

SDS	32	R	4	A
Series	*Line Voltage*[1]	*Switch Type*[2]	*Output Current – Amps*	*Control Range*[3]

NOTES
1) Line Voltage (nominal): 32 = 320 Vdc; 60 = 600 Vdc
2) Switch Type: R = Random turn-on
3) Control Range: A = 3–10 Vdc; C = 7–20 Vdc; K = 18–32 Vdc

MECHANICAL SPECIFICATION



Weight: 0.28 oz. (8g)
Dimensions in inches (millimeters)

Figure 1

ELECTRICAL SPECIFICATIONS

(+20°C ambient temperature unless otherwise specified)

INPUT (CONTROL) SPECIFICATIONS

	Min	Max	Units
Control Range			
SDSXXRXA	3	10	Vdc
SDSXXRXC	7	20	Vdc
SDSXXRXK	18	32	Vdc
Input Current Range			
SDSXXRXA	5.5	27	mA
SDSXXRXC	5.5	18	mA
SDSXXRXK	5.5	10.2	mA
Must Turn-Off Voltage			
SDSXXRXA		1.8	Vdc
SDSXXRXC		3.6	Vdc
SDSXXRXK		8.3	Vdc

INPUT (CONTROL) SPECIFICATIONS (Continued)

	Min	Max	Units
Input Resistance (Typical)			
SDSXXRXA		320	Ohms
SDSXXRXC		1070	Ohms
SDSXXRXK		3000	Ohms

ELECTRICAL SPECIFICATIONS

(+20°C ambient temperature unless otherwise specified)

OUTPUT (LOAD) SPECIFICATIONS

	Min	Max	Units
Operating Range			
SDS32	0	32	V
SDS60	0	60	V
Maximum Surge Current Rating (Non-Repetitive)			
SDS32		9	A
SDS60		6	A
Output Current Range			
SDS32	.001	4	A
SDS60	.001	2.5	A
Maximum Energy for Transil 1ms		600	W
On-State Voltage Drop (@2A)			
SDS32		0.24	V
SDS60		0.4	V
Output On Resistance			
SDS32		120	mOhms
SDS60		200	mOhms
Off-State Leakage Current		1	mA
Turn-On Time		50	µs
Turn-Off Time		600	µs
Operating Frequency Range		100*	Hz
Breakdown Voltage @1mA			
SDS32		36	Vdc
SDS60		62	Vdc

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

THERMAL CHARACTERISTICS

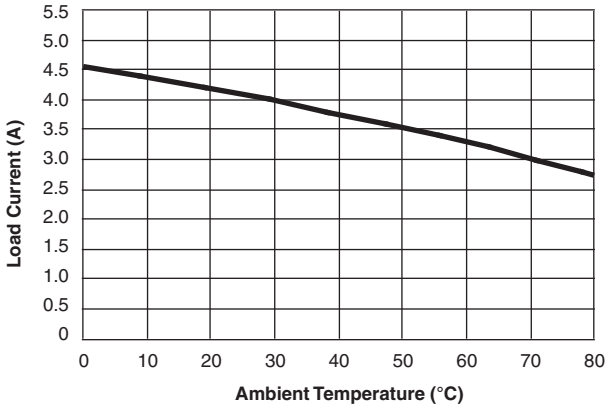


Figure 2a — SDS32 relays

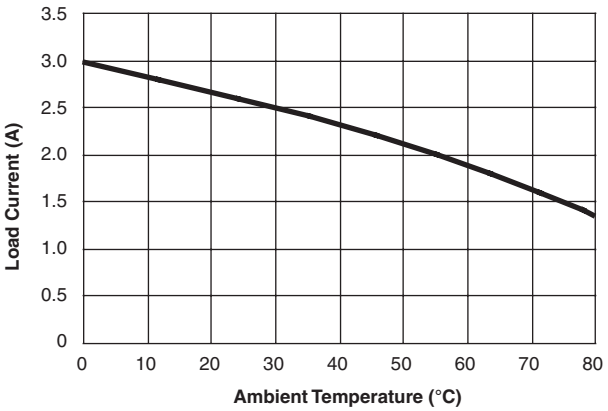


Figure 2b — SDS60 relays