

Part Number	Description
TS3R2G	2.5A, 30 Vdc

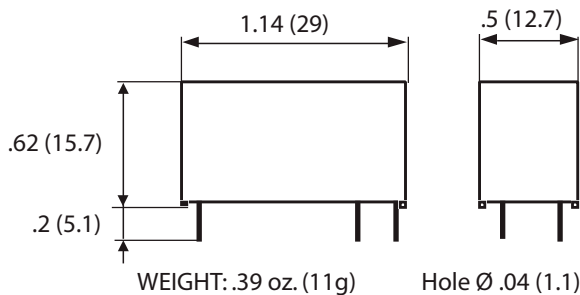
Part Number Explanation

TS	3	R	2	G
Series	Line Voltage ¹	Switch Type ²	Output Current – Amps	Control Range ³

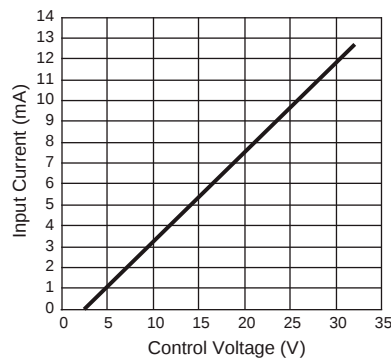
NOTES

- 1) Line Voltage (nominal) = 3=30 Vdc
- 2) Switch Type: R = Random turn-on
- 3) Control Range: G = 12-30 Vdc

MECHANICAL SPECIFICATION



CONTROL CHARACTERISTIC



FEATURES/BENEFITS

- Pin-to-pin compatible with electromechanical relays
- DC control
- DC output
- Random turn-on
- Compact size
- High inrush capabilities
- Integrated clamping voltage

DESCRIPTION

The Series TS relays provide DC switching in a compact size. The TS relays also provide a DC control. These relays can withstand high surge currents. The TS relays are pin-to-pin compatible with electromechanical relays and may be used as replacements.

APPLICATIONS

- Interface applications
- Vending machines
- Contactor driver
- Fan speed control

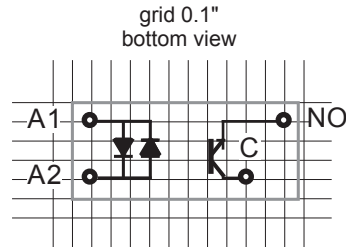
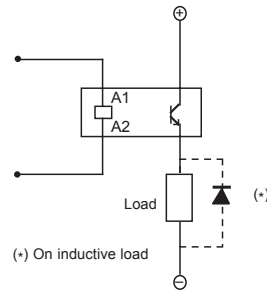
APPROVALS

All models are UL recognized.
UL File Number E128555.

INPUT (CONTROL) SPECIFICATION

	Min	Max	Units
Control Range	12	30	Vdc
Input Current Range	4.1	13	mA
(See Figure 2)			
Must Turn-Off Voltage		2.5	V
Input Resistance (Typical)		2100	Ohms

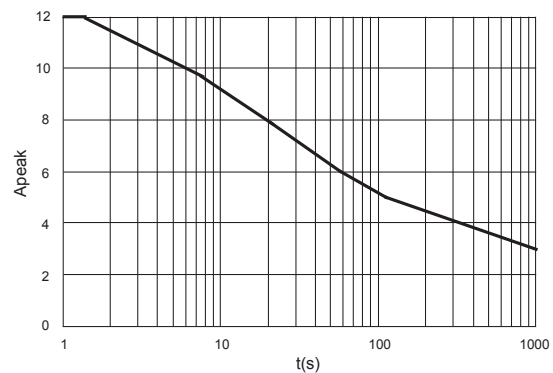
BLOCK DIAGRAM



OUTPUT (LOAD) SPECIFICATION

	Min	Max	Units
Operating Range	0	30	Vdc
Peak Voltage		60	V
Load Current Range	.001	2.5	Arms
Maximum Surge Current Rating (Non-Repetitive) (See Figure 5)		12	A
On-State Voltage Drop		0.5	V
Off-State Leakage Current (60 Hz)		1	mA
Turn-On Time (60Hz)		50	μs
Turn-Off Time (60Hz)		600	μs
Switching Frequency		100	Hz

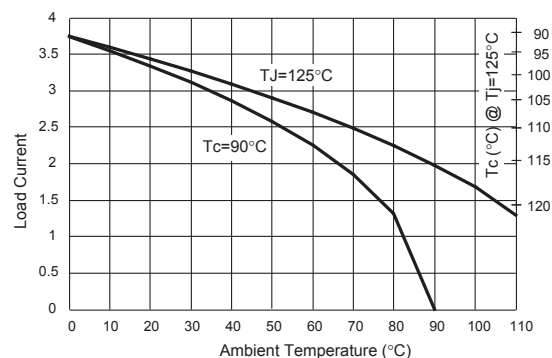
NON-REPETITIVE SURGE CURRENT



ENVIRONMENTAL SPECIFICATION

	Min	Max	Units
Maximum Junction Temperature		125	°C
Operating Temperature	-40	100	°C
Input-Output Isolation	2500		V
Junction-Case Thermal Resistance		12	°C/W
Junction-Ambient Thermal Resistance		44	°C/W
Maximum Soldering Heat (1mm case)		260	°C

THERMAL CURVES



NOTES

1. On inductive loads, a free-wheeling diode (or clamp) is recommended
2. Electrical specifications at 25°C unless otherwise specified.
3. TS32G no polarity on the control pins
4. For additional/custom options, contact factory