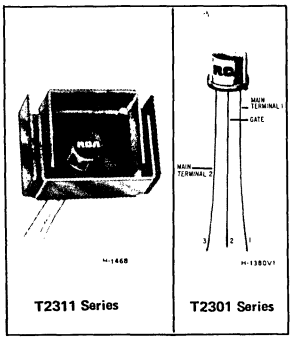
RCA
Solid State
Division

Thyristors
T2301 T2311 Series



T2311 Series | T2301 Series

2.5-Ampere Sensitive-Gate Silicon Triacs

For Low-Power Phase-Control and Load-Switching Applications

Features:

- Very high gate sensitivity — 4 mA
- Heat-radiator package for printed circuit board applications
- Small size — suitable for remote switching applications
- Shorted emitter design

Package \ Voltage	100 V Types	200 V Types	400 V Types
Modified TO-5	T2301A (40766)	T2301B (40691)	T2301D (40692)
Mod. TO-5 with Heat Radiator	T2311A (40767)	T2311B (40761)	T2311D (40762)

Numbers in parentheses are former RCA type numbers.

RCA T2301- and T2311-series triacs are gate-controlled full-wave ac switches. These devices are designed to switch from an off-state to an on-state for either polarity of applied voltage with positive or negative gate triggering voltages.

The high gate sensitivity of these triacs permits the use of economical transistorized or integrated control circuits and enhances their use in low-power phase control and load-switching applications.

The T2301-series triacs are supplied in a compact package (similar to JEDEC TO-5) and have an RMS on-state current rating of 2.5 A and repetitive peak off-state voltage ratings of 100, 200, and 400 volts.

The T2311-series triacs are the same as the T2301-series triacs, but have factory-attached heat-radiators and are intended for printed-circuit board applications.

With the exception of the characteristics listed below, data shown for the T2300 series in bulletin File No. 470 are applicable to the T2301 series.

Data shown for the T2310 series in bulletin File No. 470 are applicable to the T2311 series.

For data on additional RCA sensitive-gate triacs, refer to bulletin File No. 470.

ELECTRICAL CHARACTERISTICS:

Characteristic				Limits			Units
DC Gate-Trigger Current, I_{GT}	Mode	V_{MT2}	V_G	Min.	Typ.	Max.	
For v_D = 12 V (DC), R_L = 30Ω, and T_C = 25° C	I+	positive	positive	–	1	4	mA
	III-	negative	negative	–	1	4	
	I-	positive	negative	–	2	4	
	III+	negative	positive	–	2	4	