

TO-92 Plastic-Encapsulate Thyristors

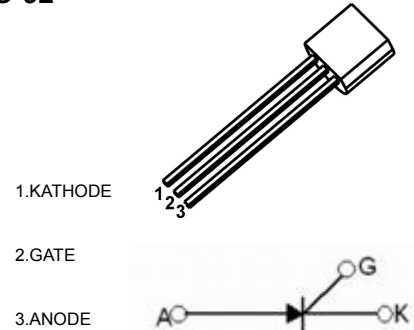
BT169

Silicon Controlled Rectifier

MAIN FEATURES

Symbol	value	unit
$I_{T(RMS)}$	0.8	A
V_{DRM}/V_{RRM}	BT169	400
T_j	Junction Temperature	-40 ~ 125
T_{stg}	Storage Temperature	-55 ~ 150

TO-92



DESCRIPTION

Logic level sensitive gate triac intended to be interfaced directly to microcontrollers, logic integrated circuits and other low power gate trigger circuits.

FEATURES

- Blocking voltage to 400 V (BT169)
- RMS on-state current to 0.8 A
- General purpose switching

APPLICATIONS

- General purpose switching
- Phase control applications
- Solid state relays

ELECTRICAL CHARACTERISTICS ($T_a=25^\circ\text{C}$ unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
On state voltage *	V_{TM}	$I_{TM}=1A$		1.7	V
Gate trigger voltage	V_{GT}	$V_{AK}=7V$		0.8	V
Peak Repetitive forward and reverse blocking voltage	V_{DRM}/V_{RRM}	$I_{DRM}/I_{RRM}= 10 \mu A$	400		V
Peak forward or reverse blocking Current	I_{DRM} I_{RRM}	$V_{AK}= \text{Rated}$ V_{DRM} or V_{RRM}		10	μA
Holding current	I_H	$I_{HL}=20mA, V_{AK}=7V$		5	mA
Gate trigger current	I_{GT}	A2	5	15	μA
		A1	15	30	μA
		A	30	80	μA
		B	80	200	μA

* Forward current applied for 1 ms maximum duration, duty cycle $\leq$ 1%。