



### Thyristors logic level

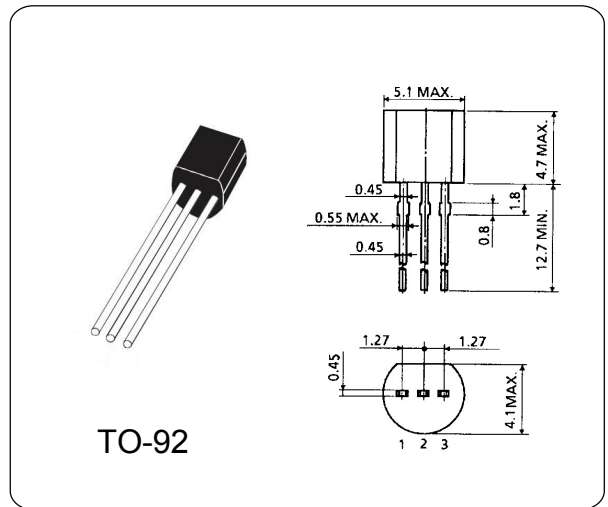
### BT169 series

#### GENERAL DESCRIPTION

Passivated, sensitive gate thyristors in a plastic envelope, intended for use in general purpose switching and phase control applications. These devices are intended to be interfaced directly to microcontrollers, logic integrated circuits and other low power gate trigger circuits.

#### ABSOLUTE MAXIMUM RATINGS ( Ta = 25 °C)

Parameter	Symbol	Typ		Unit
		BT169D	BT169G	
Repetitive peak off-state voltages	$V_{DRM}$ $V_{RRM}$	400	600	V
Average on-state current	$I_{T(AV)}$	0.5		A
RMS on-state current	$I_{T(RMS)}$	0.8		A
Non-repetitive peak on-state current	$I_{TSM}$	8.0		A
Max. Operating Junction Temperature	$T_j$	110		°C
Storage Temperature	$T_{stg}$	-45~150		°C



#### ELECTRICAL CHARACTERISTICS ( Ta = 25 °C)

Parameter	Symbol	Test Conditions	Min	Typ		Max	Unit
				BT169D	BT169G		
Repetitive peak off-state voltages	$V_{DRM}$ $V_{RRM}$		—	400	600	—	V
Average on-state current	$I_{T(AV)}$	half sine wave; $T_{mb} < 103\text{ °C}$	—	0.5		—	A
RMS on-state current	$I_{T(RMS)}$	all conduction angles	—	0.8		—	A
On-state voltage	$V_T$	$I_T = 1.0\text{ A}$	—	1.20		1.35	V
Holding current	$I_H$	$V_D = 12\text{ V}; I_{GT} = 0.5\text{ mA}$	—	0.5		5	mA
Latching current	$I_L$	$V_D = 12\text{ V}; I_{GT} = 0.5\text{ mA}$	—	0.6		6	mA
Gate trigger current	$I_{GT}$	$V_D = 12\text{ V}; I_T = 10\text{ mA}$	—	15		200	uA
Gate trigger voltage	$V_{GT}$	$V_D = 12\text{ V}; I_T = 10\text{ mA}$	—	0.5		0.8	V