TIGER ELECTRONIC CO.,LTD

Product specification

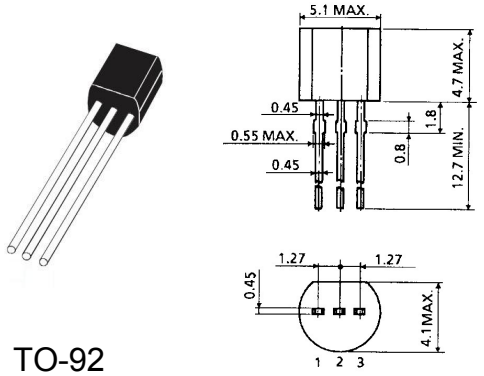
Thyristors logic level — BT169 series

GENERAL DESCRIPTION

Passivated, sensitive gate thyristors ina plastic envelope, intended foruse 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



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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 °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 A	—	1.20		1.35	V
Holding current	I_H	V_D =12 V; I_{GT} = 0.5 mA	—	0.5		5	mA
Latching current	I_L	V_D =12 V; I_{GT} = 0.5 mA	—	0.6		6	mA
Gate trigger current	I_{GT}	V_D =12 V; I_T = 10 mA	—	15		200	uA
Gate trigger voltage	V_{GT}	V_D =12 V; I_T = 10 mA	—	0.5		0.8	V