

isc Thyristors

ISCI29

DESCRIPTION

- With TO-92 package
- Sensitive gate trigger current
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

APPLICATIONS

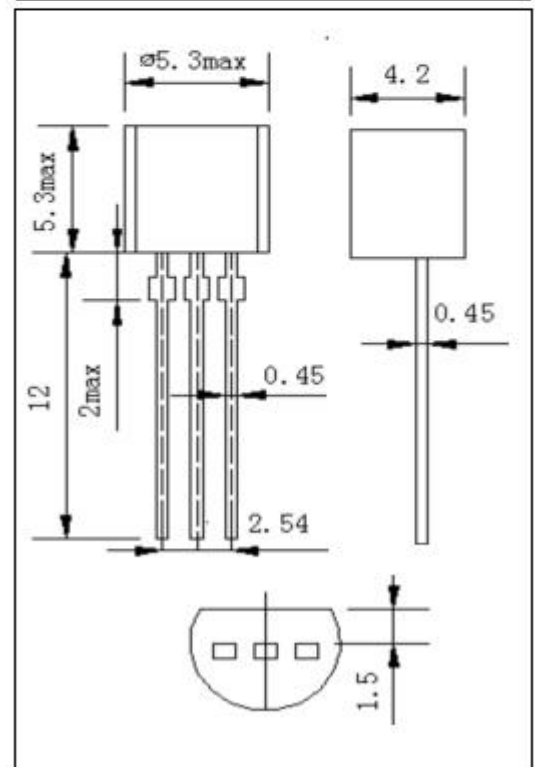
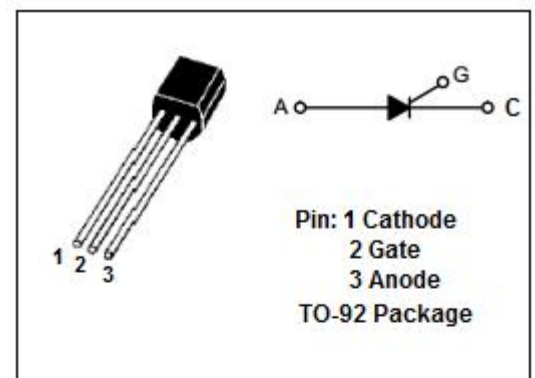
- Designed for high volume, line-powered consumer application such as relay and lamp drivers, small motor controls, gate drivers for larger thyristors, and sensing and detection circuits

ABSOLUTE MAXIMUM RATINGS(T_a=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V _{DRM}	Repetitive peak off-state voltage	600	V
V _{RRM}	Repetitive peak off-state voltage	600	V
I _{T(RMS)}	RMS on-state current(180° conduction angle)	0.8	A
I _{TSM}	Non-repetitive peak on-state current((t _p =10ms))	10	A
I _{GM}	Peak gate current((t _p =20 μ s))	1	A
P _{GM}	Peak gate power	0.1	W
P _{G(AV)}	Average gate power	0.01	W
T _j	Operating junction temperature	-40-125	°C
T _{stg}	Storage temperature range	-40-150	°C

THERMAL RESISTANCE

SYMBOL	PARAMETER	MAX	UNIT
R _{th(j-c)}	Junction to case	75	°C/W



isc Thyristors**ISC129****ELECTRICAL CHARACTERISTICS ($T_c=25^\circ\text{C}$ unless otherwise specified)**

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP	MAX	UNIT
I_{RRM}	Repetitive peak reverse current	$V_R = V_{RRM}$ $V_R = V_{RRM}; T_j = 125^\circ\text{C}$			10 100	μA
I_{DRM}	Repetitive peak off-state current	$V_D = V_{DRM}$ $V_D = V_{DRM}; T_j = 125^\circ\text{C}$			10 100	μA
I_{GT}	Gate trigger current	$V_D = 8\text{V}; R_L = 100\Omega$			200	μA
V_{TM}	On-state voltage	$I_T = 1\text{A}, t_p = 380\mu\text{s}$			1.6	V
I_H	Holding current	$I_T = 0.1\text{A}$, Gate Open			5	mA
V_{GT}	Gate trigger voltage	$V_D = 8\text{V}; R_L = 100\Omega$			1	V