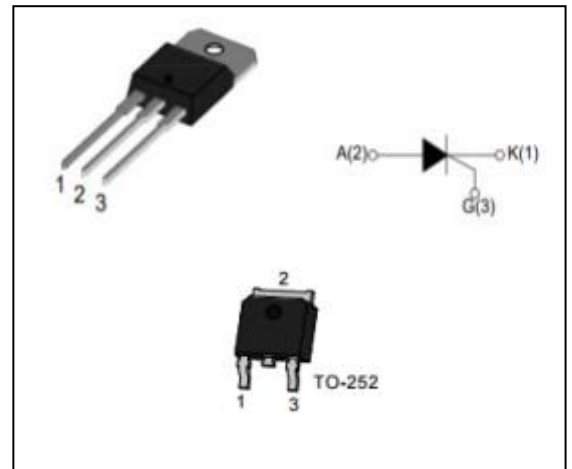


Unidirectional thyristors

Feature

PNPN four-layer structure silicon
unidirectional device; Single-sided grooving
technology with independent intellectual
property rights, countertop glass passivation
process; Multilayer metallized electrode on the
back; It has high blocking voltage and high
temperature stability;



Applications

Motor speed control controllers such as vacuum
cleaners and power tools;

Solid state relays; heating controller (temperature regulation); Other phased circuitry

Absolute Maximum Ratings $T_A=25^{\circ}\text{C}$ Unless Otherwise noted

Symbol	Parameter		value	Units
$I_{T(RMS)}$	RMS on-State Current	$T_c=90^{\circ}\text{C}$	8	A
I_{TSM}	Non-Repetitive Peak On-State	$F=50\text{HZ}$ $t=20\text{ms}$	80	A
I^2t	I^2t for Fusing	$t_p=10\text{ms}$	64	A^2S
di/dt	Repetitive Rate of Rise of On-State Current After Triggering	$T_j=125^{\circ}\text{C}$	50	A/us
V_{DRM}/V_{RRM}	Repetitive Peak Off-State Voltages	$T_j=25^{\circ}\text{C}$	800	V
I_{GM}	Peak Gate Current	$t_p=20\mu\text{s}$ $T_j=125^{\circ}\text{C}$	4	A
$P_{G(AV)}$	Average Gate Power	$T_j=125^{\circ}\text{C}$	1	W
T_{stg} T_j	Storage Temperature Operating Junction Temperature		$-40\text{to}+150$ $-40\text{to}+125$	$^{\circ}\text{C}$



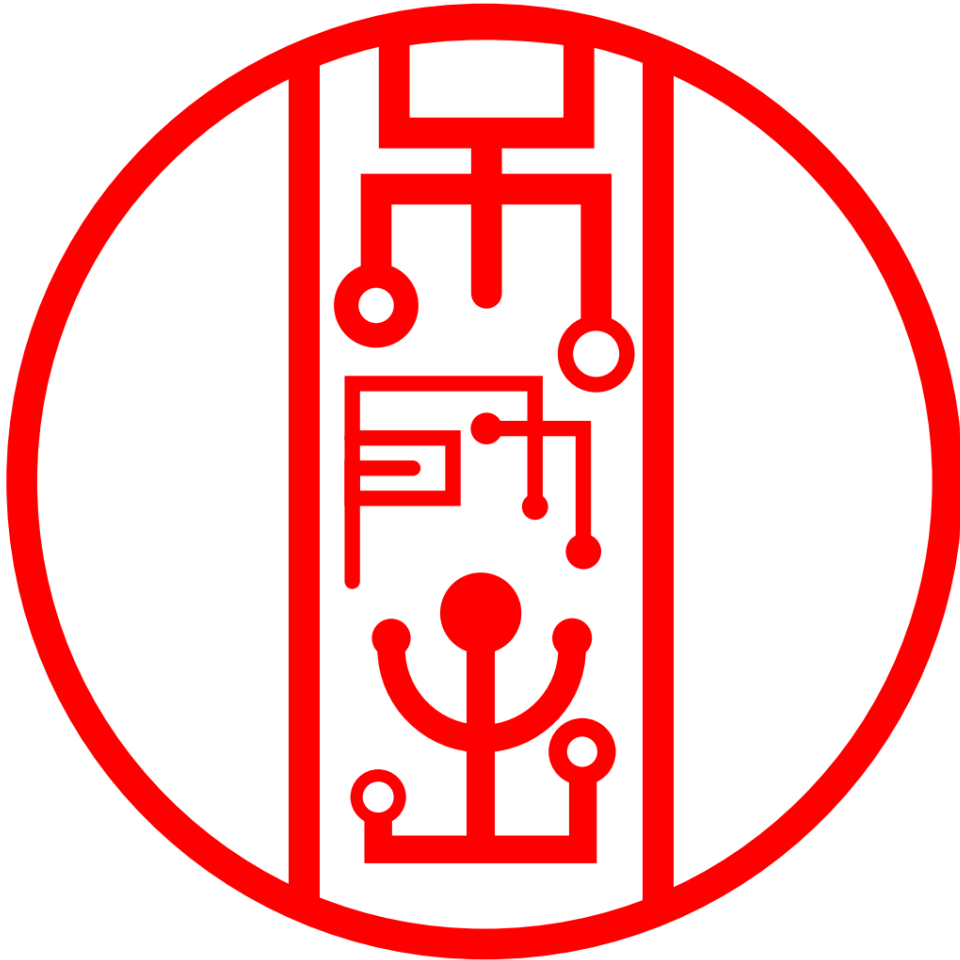
●电特性

Symbol	PARAMETER AND CONDITIONS	Quadrant		value	Units
I _{GT}	Gate Trigger Current V _D =12V R _L =100 Ω	I	MAX	15	mA
V _{GT}	Gate Trigger Voltage		MAX	1.5	V
V _{GD}	Non-triggering gate voltag T _j =125°C		MIN	0.2	V
I _H	Holding Current I _T =0.5A		MAX	30	mA
I _L	Latching Current I _G =1.2I _{GT}	I	MAX	30	mA
				40	
dv/dt	Critical rate of rise of off- state voltage V _D =2/3V _{DRM} , T _j =125°C		MIN	500	V/us
(dv/dt) _c	T _j =125°C		MIN	10	V/us

●静态参数

Symbol	PARAMETER AND CONDITIONS			value	Units
V _{TM}	Peak on-state voltage I _{TM} = 24A	T _j =25°C	MAX	1.5	V
V _{T0}	Forward On-State Voltage	T _j =125°C	MAX	0.86	V
R _d	Slope resistance	T _j =125°C	MAX	36.6	m Ω
I _{DRM} I _{RRM}	Peak Repetitive Blocking Current Peak Repetitive Reverse Current	T _j =25°C T _j =125°C	MAX	5	uA
				1	mA
R _{th(j-c)}	Thermal resistance, junction to case	BTB		1.75	°C/W

- BT151 特性曲线:



●TO-252

