

SANYO**DRA2T**

Silicon Planar Type

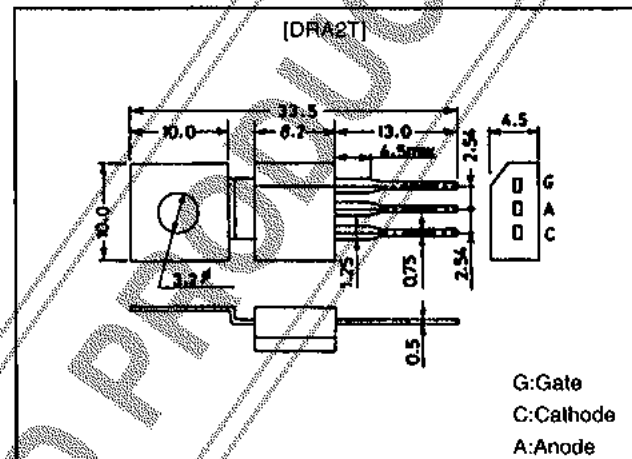
2.0A Reverse Blocking Thyristor**Features**

- TO-202 package facilitating easy mounting.
- Peak OFF-state (reverse) voltage : 100 to 600V.
- Average ON-state current : 2A

Package Dimensions

unit:mm

1150

**Specifications****Absolute Maximum Ratings at $T_a = 25^\circ\text{C}$**

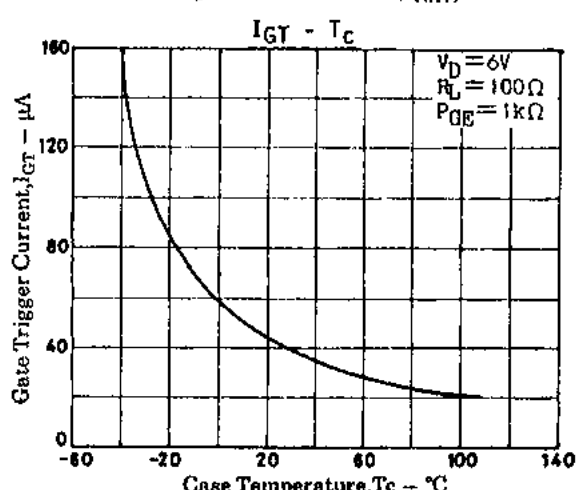
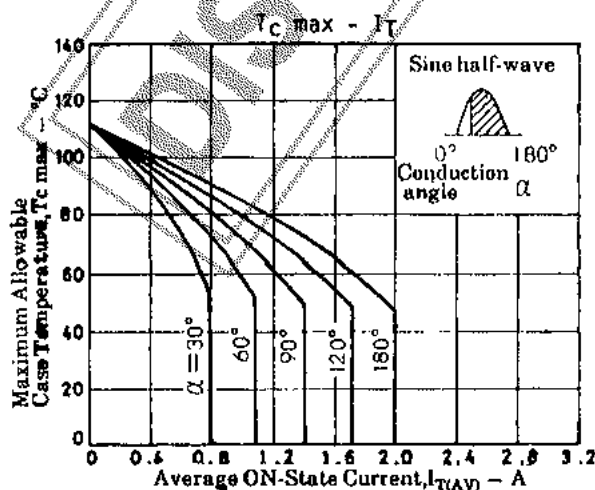
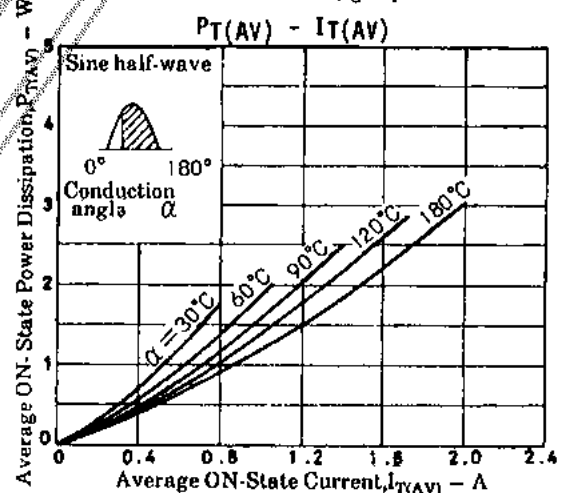
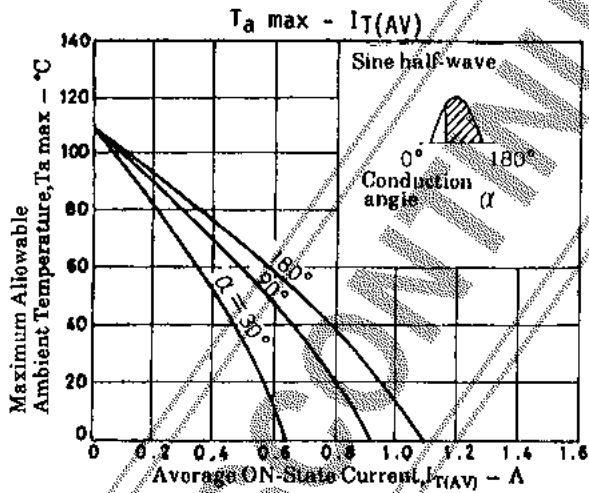
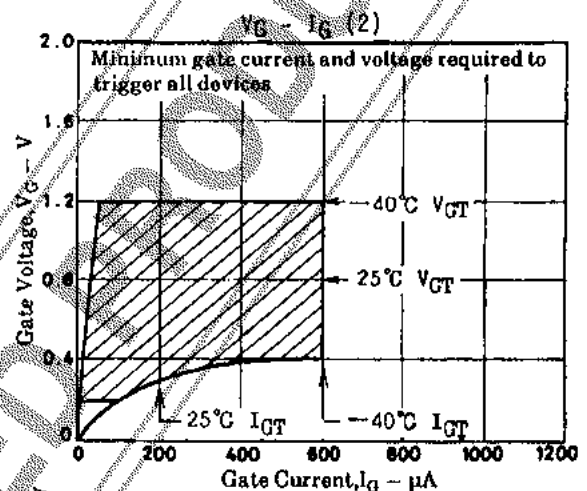
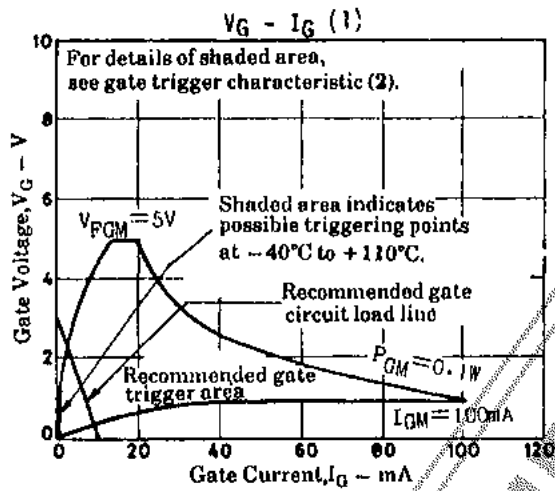
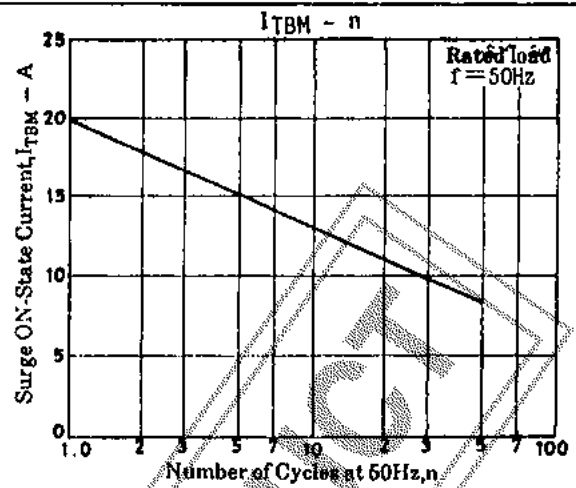
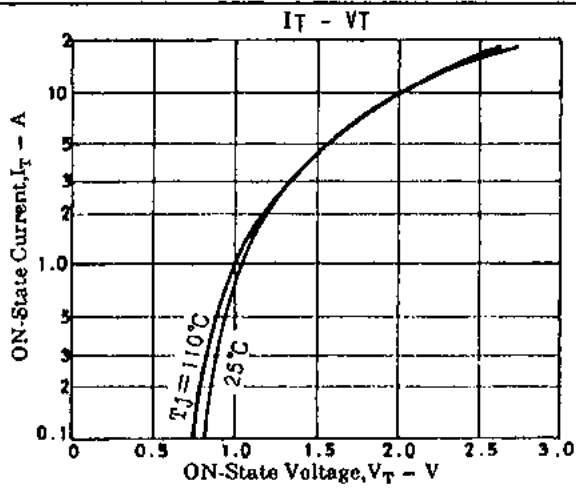
Parameter	Symbol	Conditions	DRA2TB	DRA2TC	DRA2TE	DRA2TG	Unit
Repetitive Peak OFF-State Voltage	V_{DRM}	$R_{GK}=1\Omega$	100	200	400	600	V
Non-Repetitive Peak Reverse Voltage	V_{RSM}	$R_{GK}=1\Omega$	150	300	500	720	V
Repetitive Peak Reverse Voltage	V_{RRM}	$R_{GK}=1\Omega$	100	200	400	600	V
Average ON-State Current	$I_T(AV)$	$T_c=45^\circ\text{C}$, single phase half-wave	→	→	→	2	A
Surge ON-State Current	I_{TSM}	Sine half-wave 1 cycle, 50Hz	→	→	→	20	A
Ampere Squared-Seconds	I^2t, di	$t_{avg} \leq 10\text{ms}$	→	→	→	1.6	A^2S
Peak Gate Power Dissipation	P_{GM}	$f \geq 50\text{Hz}$, duty $\leq 10\%$	→	→	→	0.1	W
Average Gate Power Dissipation	$P_G(AV)$		→	→	→	0.01	W
Peak Gate Forward Current	I_{FGM}	$f \geq 50\text{Hz}$, duty $\leq 10\%$	→	→	→	0.1	A
Peak Gate Reverse Voltage	V_{RGM}		→	→	→	5	V
Junction Temperature	T_j		→	→	→	110	$^\circ\text{C}$
Storage Temperature	T_{stg}		→	→	→	-40 to +110	$^\circ\text{C}$
Weight			→	→	→	1.5	g

Electrical Characteristics at $T_a = 25^\circ\text{C}$

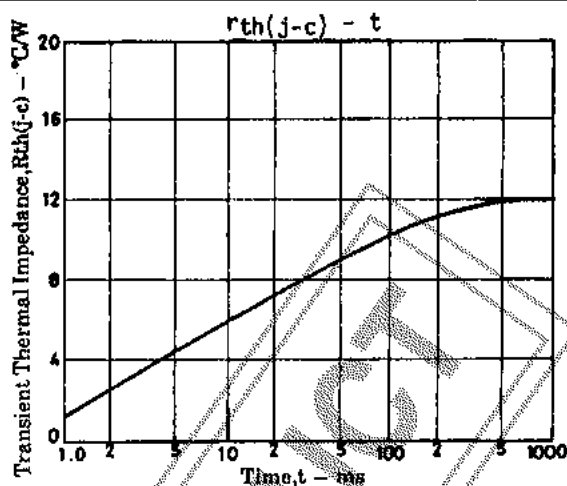
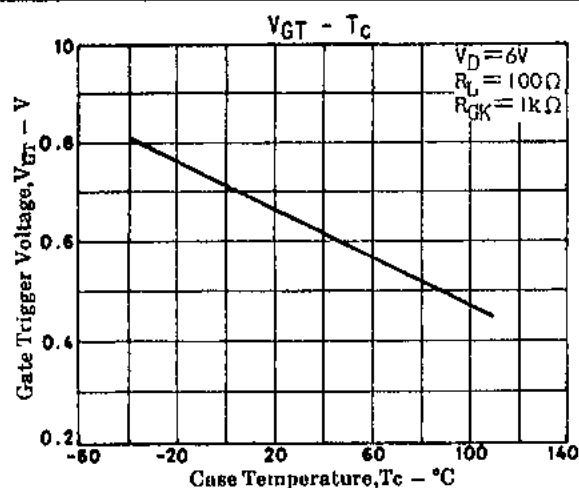
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Repetitive Peak OFF-State Current	I_{DRM}	$T_j=110^\circ\text{C}$, $V_D=V_{DRM}$, $R_{GK}=1k\Omega$			0.2	mA
Repetitive Peak Reverse Current	I_{RRM}	$T_j=110^\circ\text{C}$, $V_R=V_{RRM}$, $R_{GK}=1k\Omega$			0.2	mA
Peak ON-State Voltage	V_{TM}	$I_{TM}=10\text{A}$			2.0	V
Critical Rate of Rise of OFF-State Voltage	dw/dt	$T_j=110^\circ\text{C}$, $V_D=V_{DRM}$, $R_{GK}=1k\Omega$		15		V/ μs
				10(G)		
Holding Current	I_H	$V_D=24\text{V}$, $R_{GK}=1k\Omega$		3.0		mA
Gate Trigger Current	I_{GT}	$V_D=6\text{V}$, $R_L=100\Omega$, $R_{GK}=1k\Omega$			0.2	mA
Gate Trigger Voltage	V_{GT}	$V_D=6\text{V}$, $R_L=100\Omega$, $R_{GK}=1k\Omega$			0.8	V
Gate Nontrigger Voltage	V_{GD}	$T_c=110^\circ\text{C}$, $V_D=\text{Rated voltage}$, $R_{GK}=1k\Omega$	0.2			V
Thermal Resistance	$R_{th}(j-c)$				12	$^\circ\text{C/W}$

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