

SANYO**DRA5**

Silicon Diffused Junction Type

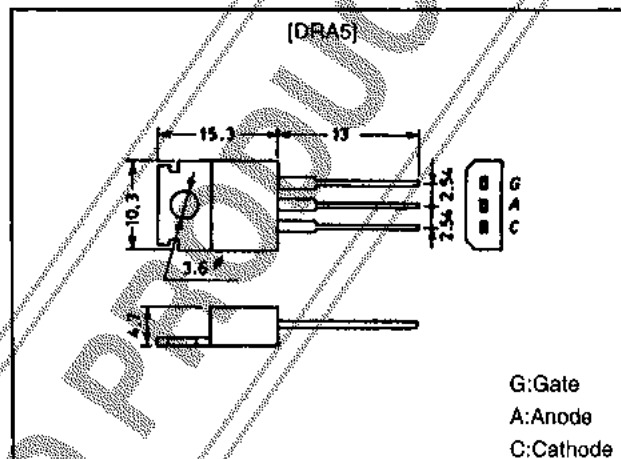
5.0A Reverse Blocking Thyristor**Features**

- Glass passivation for high reliability.
- Peak OFF-state (reverse) voltage : 100 to 600V.
- Average ON-state current : 5A.
- TO-220 package.
- Weight : 2g.

Package Dimensions

unit:mm

1104

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

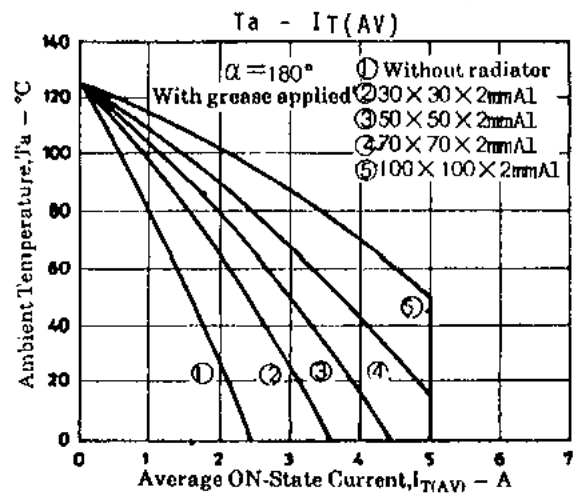
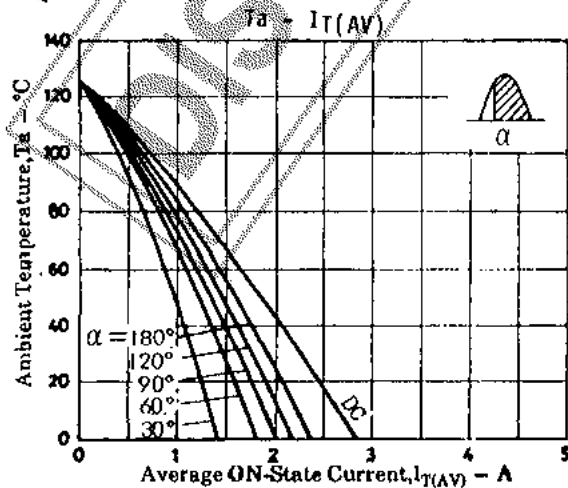
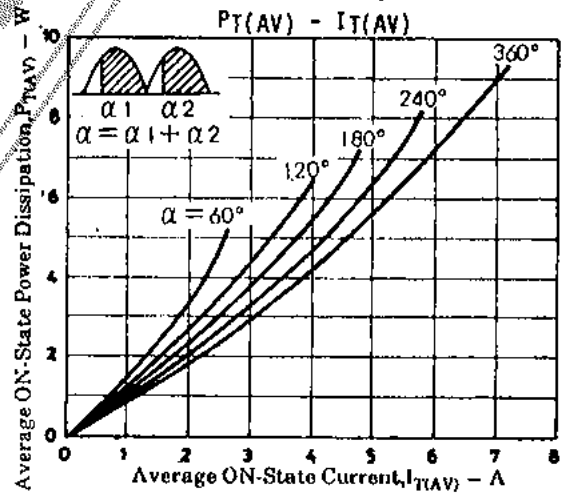
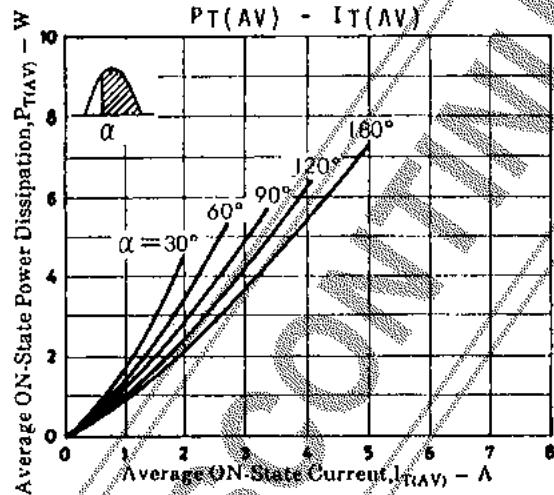
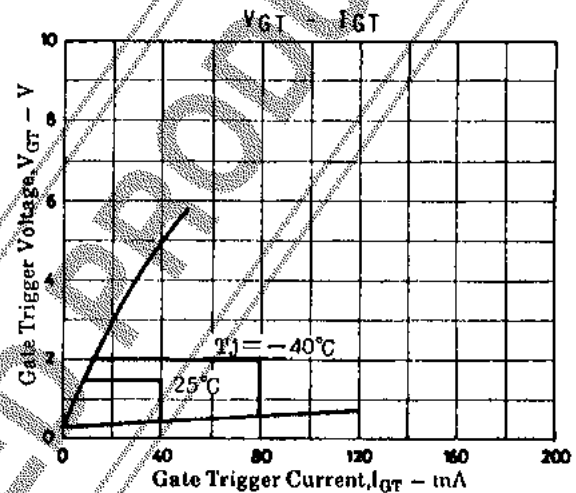
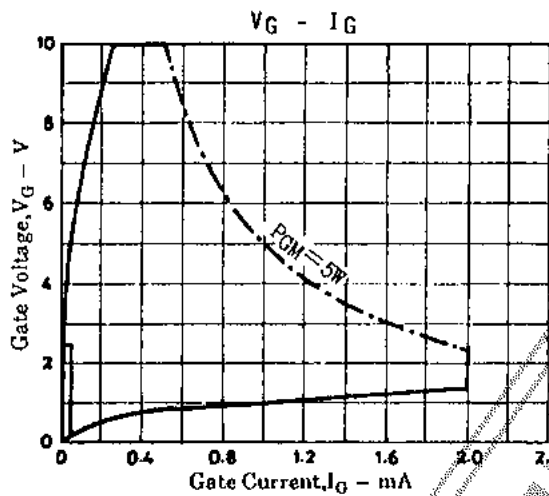
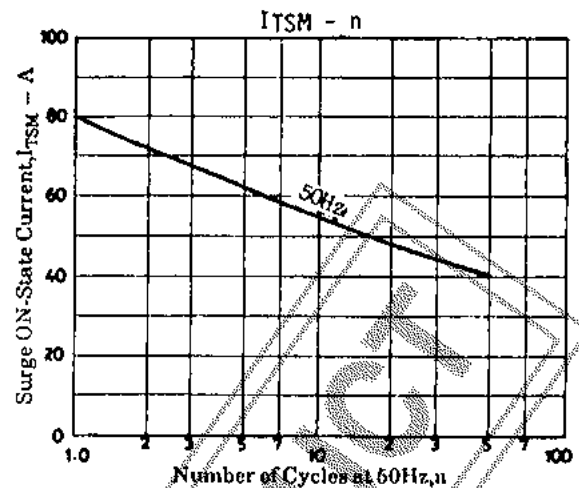
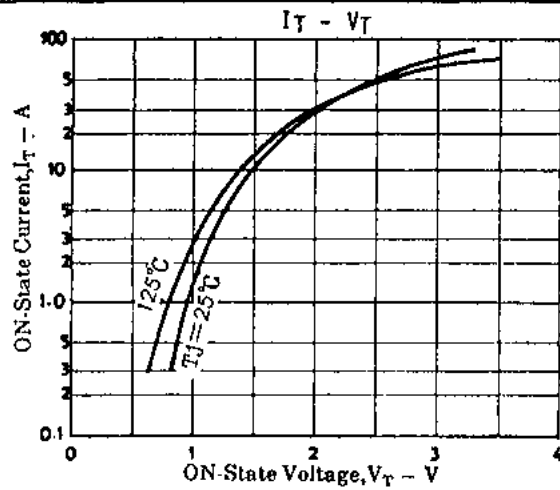
Parameter	Symbol	Conditions	DRA5B	DRA5C	DRA5E	DRA5G	Unit
Repetitive Peak OFF-State Voltage	V_{DRM}		100	200	400	600	V
Non-Repetitive Peak Reverse Voltage	V_{RRM}		150	300	500	700	V
Repetitive Peak Reverse Voltage	V_{RRM}		100	200	400	600	V
Average ON-State Current	$I_T(AV)$	$T_J = 91^\circ\text{C}$, single-phase half-wave	→	→	→	5	A
RMS ON-State Current	$I_T(RMS)$		→	→	→	7.8	A
Surge ON-State Current	I_{TSM}	Sine half-wave 1 cycle, 50Hz				80	A
Ampere Squared-Seconds	I^2t		→	→	→	32	A ² S
Peak Gate Power Dissipation	P_{GM}		→	→	→	5	W
Average Gate Power Dissipation	$P_{G(AV)}$		→	→	→	0.5	W
Peak Gate Forward Current	I_{FGM}		→	→	→	2	A
Peak Gate Forward Voltage	V_{FGM}					10	V
Peak Gate Reverse Voltage	V_{RGM}		→	→	→	5	V
Junction Temperature	T_J		→	→	→	125	$^\circ\text{C}$
Storage Temperature	T_{stg}		→	→	→	-40 to +125	$^\circ\text{C}$

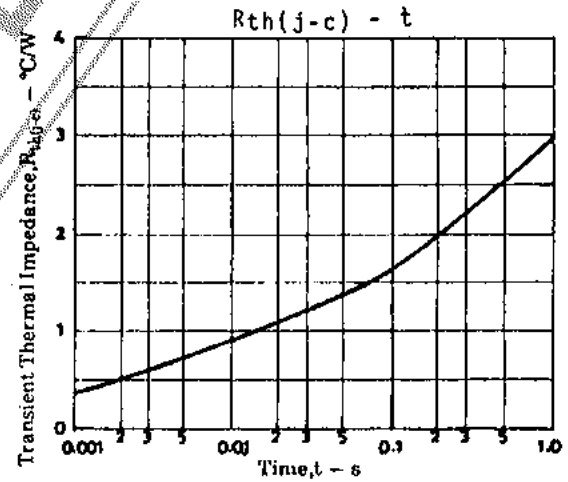
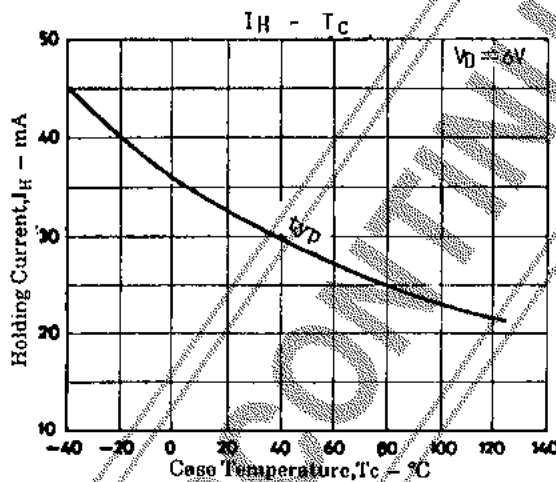
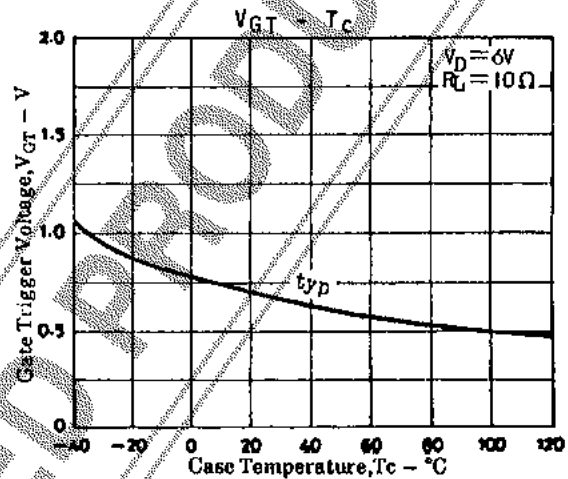
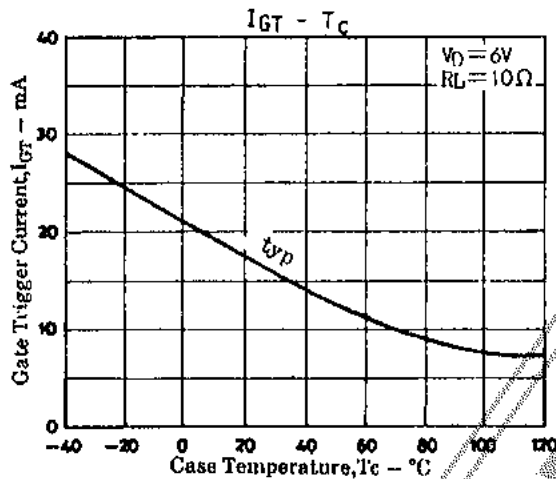
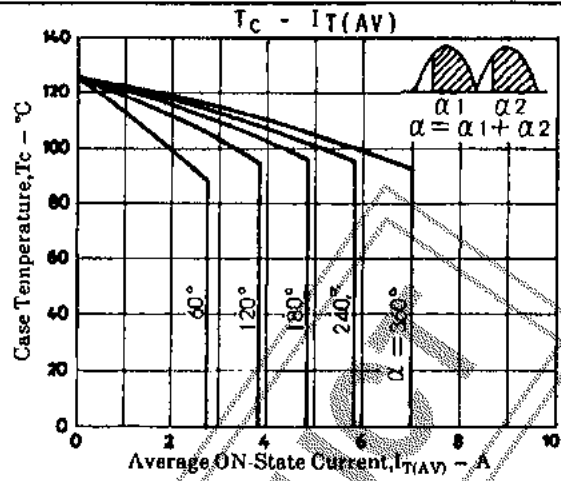
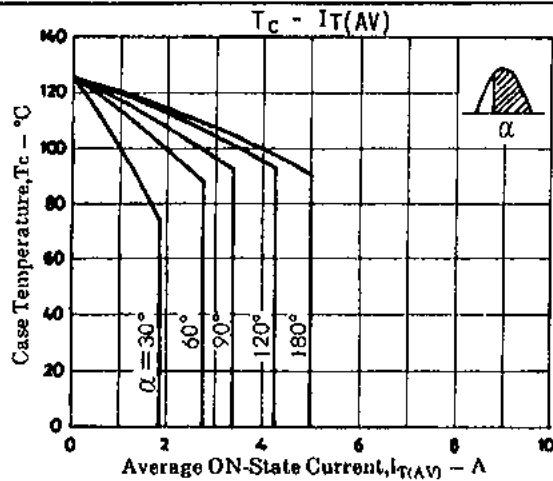
Electrical Characteristics at $T_a = 25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Repetitive Peak OFF-State Current	I_{DRM}	$T_J = 125^\circ\text{C}$, $V_D = V_{DRM}$			2	mA
Repetitive Peak Reverse Current	I_{RRM}	$T_J = 125^\circ\text{C}$, $V_R = V_{RRM}$			2	mA
ON-State Voltage	V_T	$I_T = 10\text{A}$			1.6	V
Critical Rate of Rise of OFF-State Voltage	dw/dt	$T_J = 125^\circ\text{C}$, $V_D = 2/3 V_{DRM}$	30			V/ μs
Holding Current	I_H	$R_L = 100\Omega$			60	mA
Gate Trigger Current	I_{GT}	$V_D = 6\text{V}$, $R_L = 10\Omega$			40	mA
Gate Trigger Voltage	V_{GT}	$V_D = 6\text{V}$, $R_L = 10\Omega$			1.5	V
Gate Nontrigger Voltage	V_{GD}	$T_J = 125^\circ\text{C}$, $V_D = 2/3 V_{DRM}$	0.2			V
Thermal Resistance	$R_{th(j-c)}$				3	$^\circ\text{C/W}$

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