

No.819D

**DRA 5****SANYO**

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

**Absolute Maximum Ratings at Ta = 25°C**

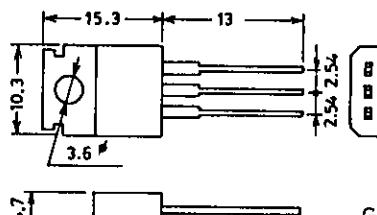
		DRA5B	DRA5C	DRA5E	DRA5G	unit
Repetitive Peak OFF-State Voltage	V <sub>DRM</sub>	100	200	400	600	V
Non-Repetitive Peak	V <sub>RSM</sub>	-150	-300	-500	-700	V
Reverse Voltage						
Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	-100	-200	-400	-600	V
Average ON-State Current	I <sub>T(AV)</sub>	T <sub>c</sub> =91°C, single-phase half-wave	→	→	→	5 A
RMS ON-State Current	I <sub>T(RMS)</sub>		→	→	→	7.8 A
Surge ON-State Current	I <sub>TSM</sub>	Sine half-wave 1 cycle, 50Hz	→	→	→	80 A
Amperes Squared-Seconds	$\int i^2 T \cdot dt$		→	→	→	32 A <sup>2</sup> S
Peak Gate Power Dissipation	P <sub>GM</sub>		→	→	→	5 W
Average Gate Power Dissipation	P <sub>G(AV)</sub>		→	→	→	0.5 W
Peak Gate Forward Current	I <sub>FGM</sub>		→	→	→	2 A
Peak Gate Forward Voltage	V <sub>FGM</sub>		→	→	→	10 V
Peak Gate Reverse Voltage	V <sub>RGM</sub>		→	→	→	5 V
Junction Temperature	T <sub>j</sub>		→	→	→	125 °C
Storage Temperature	T <sub>stg</sub>		→	→	-40 to +125	°C

**Electrical Characteristics at Ta = 25°C**

			min	typ	max	unit
Repetitive Peak OFF-State Current	I <sub>DRM</sub>	T <sub>j</sub> =125°C, V <sub>D</sub> =V <sub>DRM</sub>			2	mA
Repetitive Peak Reverse Current	I <sub>RRM</sub>	T <sub>j</sub> =125°C, V <sub>R</sub> =V <sub>RRM</sub>			2	mA
ON-State Voltage	V <sub>T</sub>	I <sub>T</sub> =15A			1.6	V
Critical Rate of Rise of OFF-State Voltage	dv/dt	T <sub>c</sub> =125°C, V <sub>D</sub> =2/3V <sub>DRM</sub>	30			V/μs
Holding Current	I <sub>H</sub>	R <sub>L</sub> =100Ω			60	mA
Gate Trigger Current	I <sub>GT</sub>	V <sub>D</sub> =6V, R <sub>L</sub> =10Ω			40	mA
Gate Trigger Voltage	V <sub>GT</sub>	V <sub>D</sub> =6V, R <sub>L</sub> =10Ω			1.5	V
Gate Nontrigger Voltage	V <sub>GD</sub>	T <sub>c</sub> =125°C, V <sub>D</sub> =2/3V <sub>DRM</sub>	0.2			V
Thermal Resistance	R <sub>th(j-c)</sub>				3	°C/W

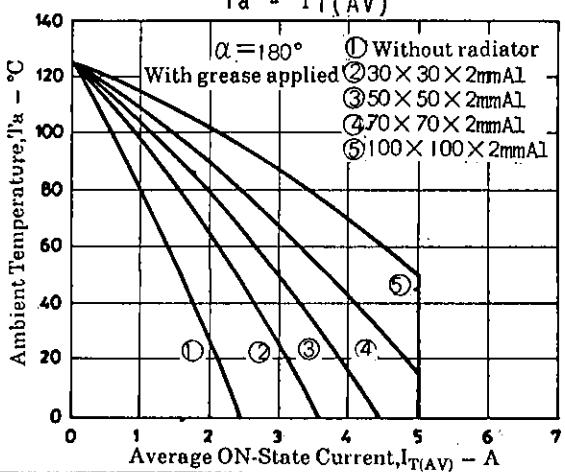
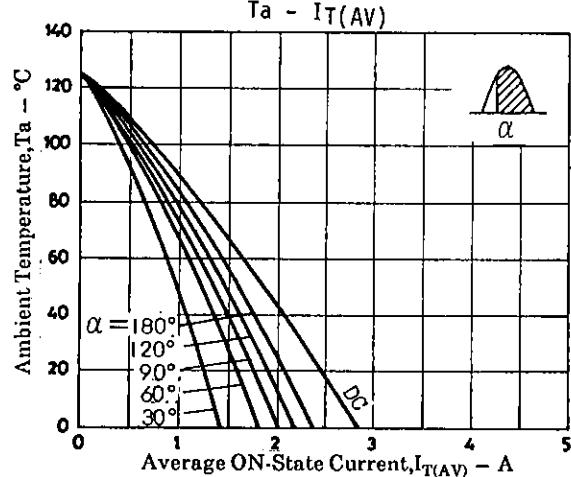
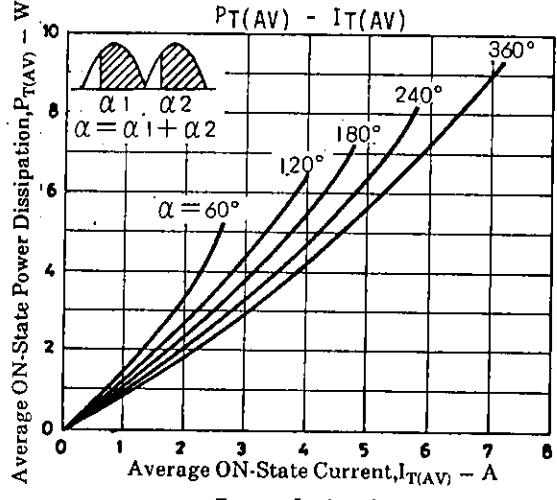
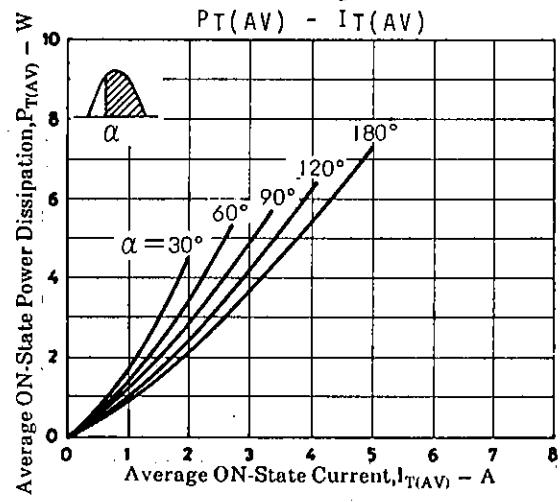
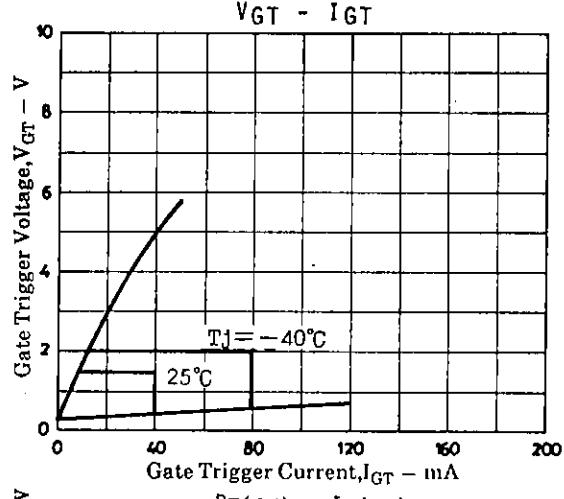
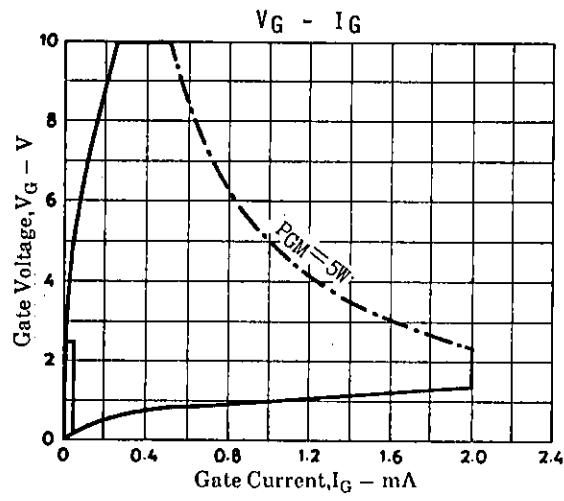
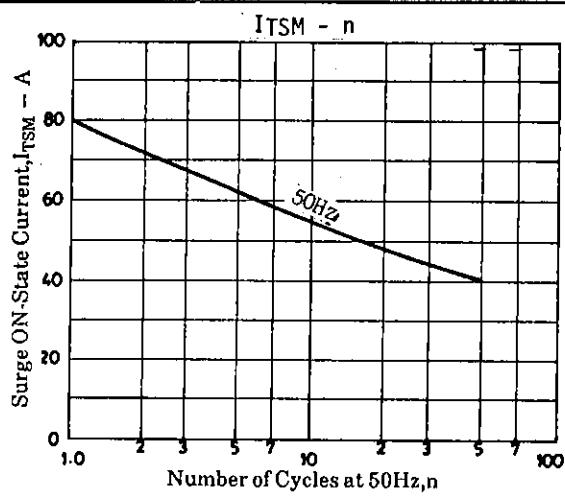
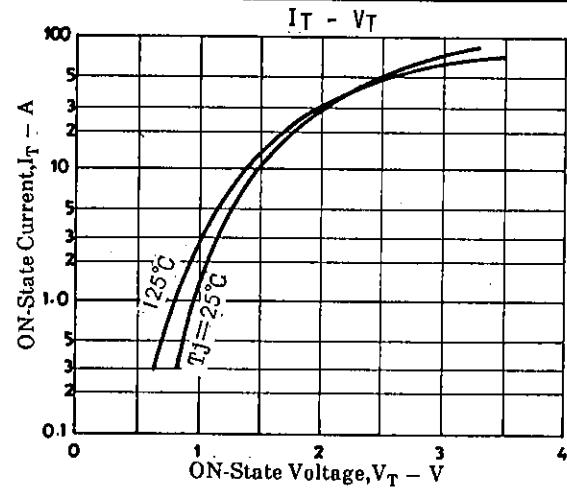
**Package Dimensions 1104**

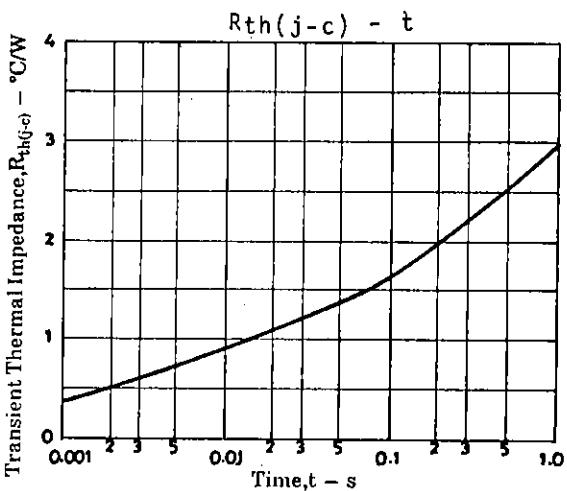
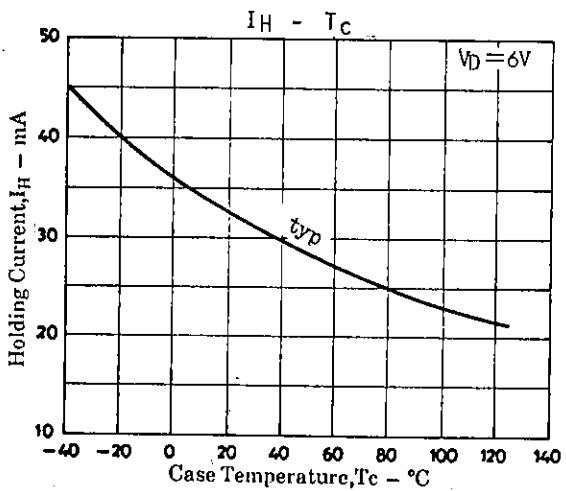
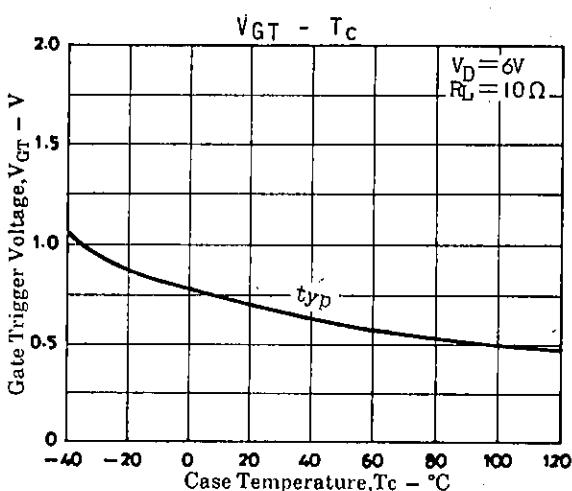
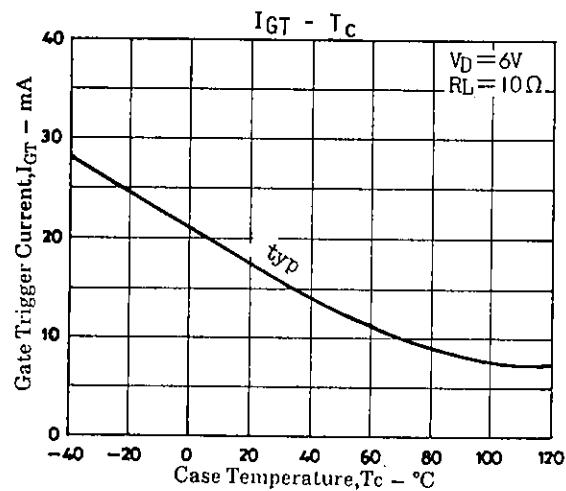
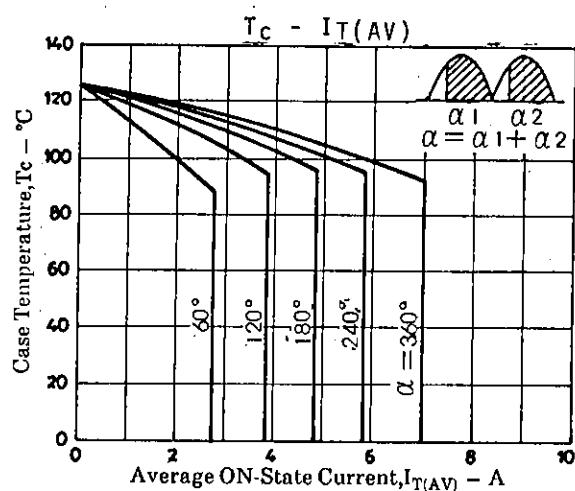
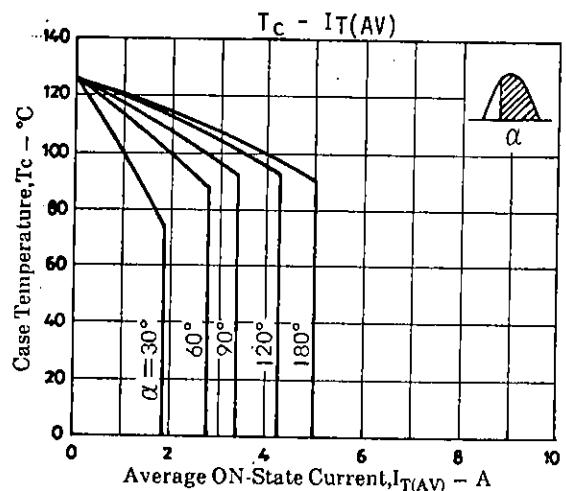
(unit: mm)



G. Gate  
A. Anode  
C. Cathode

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