

SANYO

No.820D

DRA8

Silicon Diffused Junction Type

8.0A Reverse Blocking Thyristor**Features**

- Glass passivation for high reliability
- Peak OFF-state (reverse) voltage : -100 to -600 V
- Average ON-state current : 8A
- TO-220 package
- Weight : 2g

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

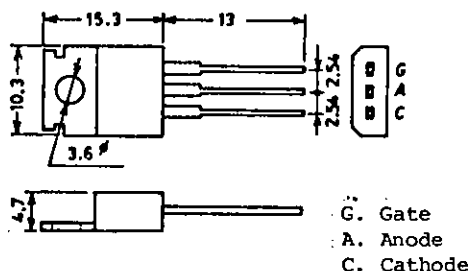
		DRA8B	DRA8C	DRA8E	DRA8G	unit
Repetitive Peak OFF-State Voltage	V_{DRM}	100	200	400	600	V
Non-Repetitive Peak Reverse Voltage	V_{RSM}	-150	-300	-500	-700	V
Repetitive Peak Reverse Voltage	V_{RRM}	-100	-200	-400	-600	V
Average ON-State Current	$I_{\text{T(AV)}}$	$T_c = 83^\circ\text{C}$, single-phase half-wave		→	8	A
RMS ON-State Current	$I_{\text{T(RMS)}}$	→	→	→	12.6	A
Surge ON-State Current	I_{TSM}	→	→	→	120	A
		Sine half-wave 1 cycle, 50Hz				
Amperes Squared-Seconds	$\int i_{\text{T}}^2 \cdot dt$	→	→	→	70	A ² S
Peak Gate Power Dissipation	P_{GM}	→	→	→	5	W
Average Gate Power Dissipation	$P_{\text{G(AV)}}$	→	→	→	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 $T_a = 25^\circ\text{C}$

			min	typ	max	unit
Repetitive Peak OFF-State Current	I_{DRM}	$T_j = 125^\circ\text{C}, V_D = V_{\text{DRM}}$			2	mA
Repetitive Peak Reverse Current	I_{RRM}	$T_j = 125^\circ\text{C}, V_D = V_{\text{RRM}}$			2	mA
ON-State Voltage	V_T	$I_T = 25\text{A}$			1.6	V
Critical Rate of Rise of OFF-State Voltage	dv/dt	$T_c = 125^\circ\text{C}, V_D = 2/3 V_{\text{DRM}}$	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}	$T_a = 125^\circ\text{C}, V_D = 2/3 V_{\text{DRM}}$	0.2			V
Thermal Resistance	$R_{\text{th(j-c)}}$				3	$^\circ\text{C/W}$

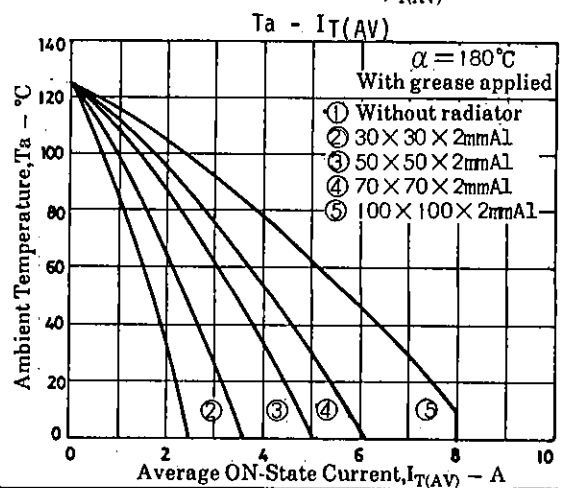
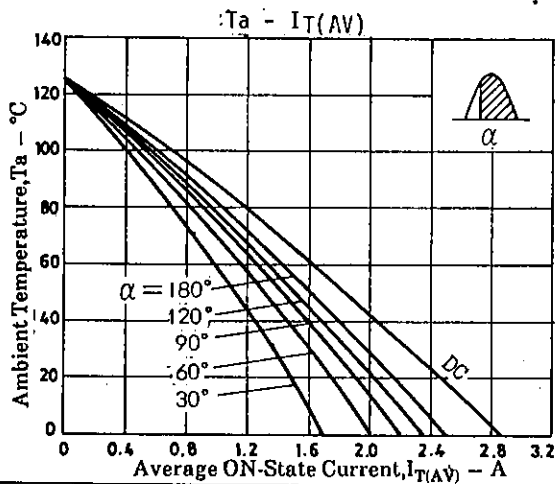
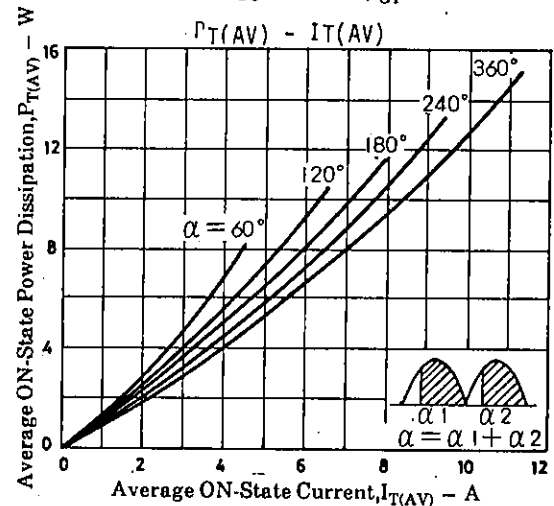
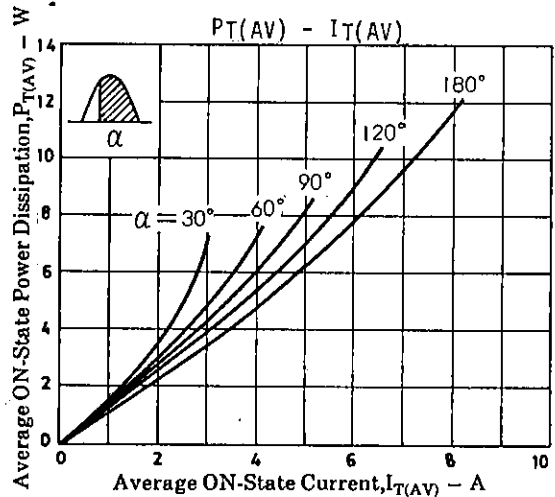
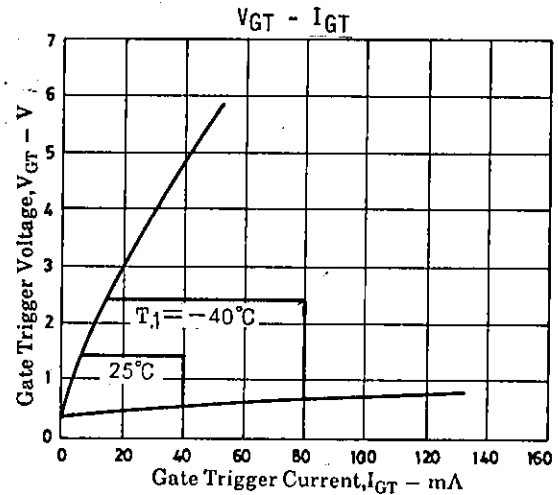
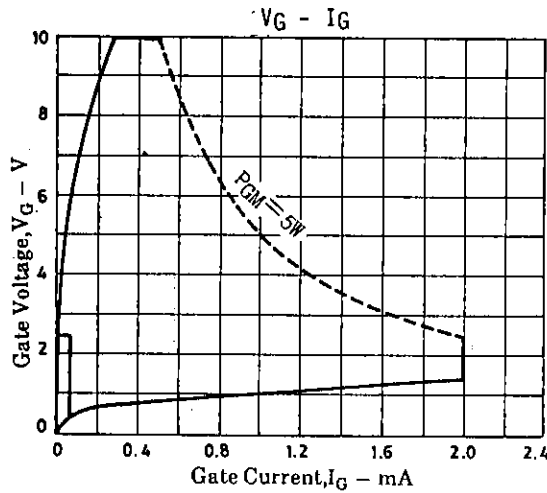
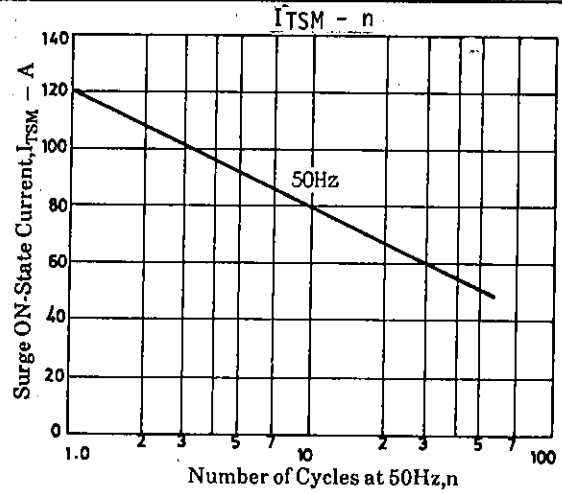
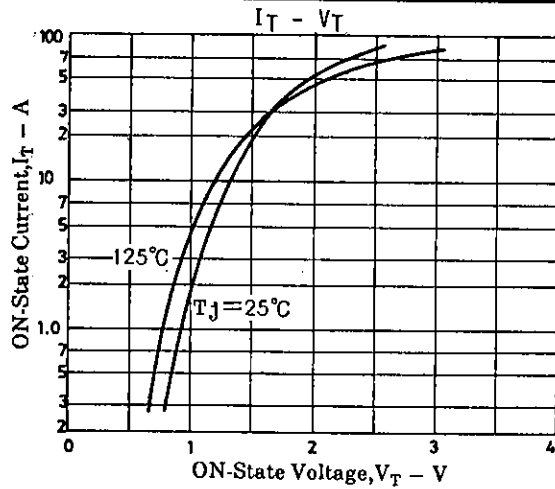
Package Dimensions 1104

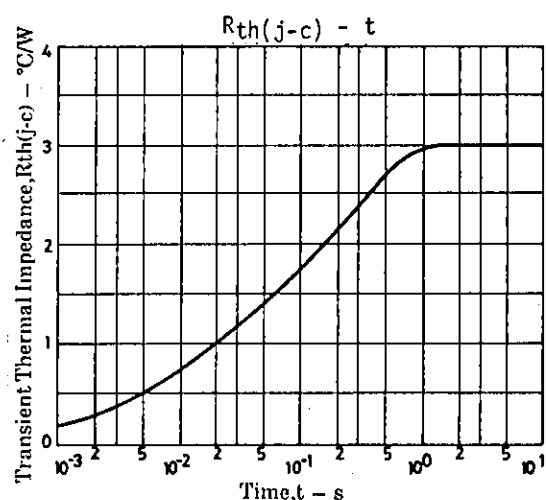
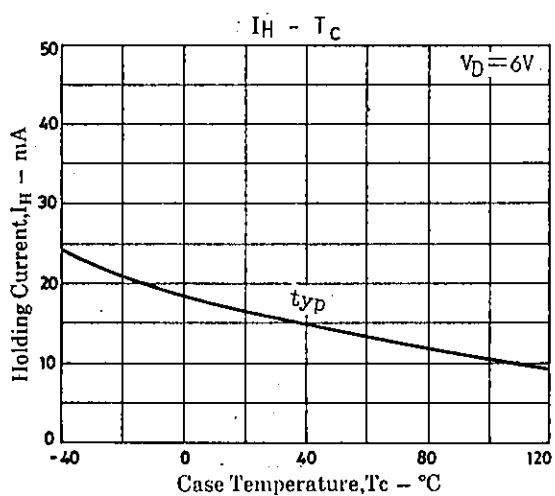
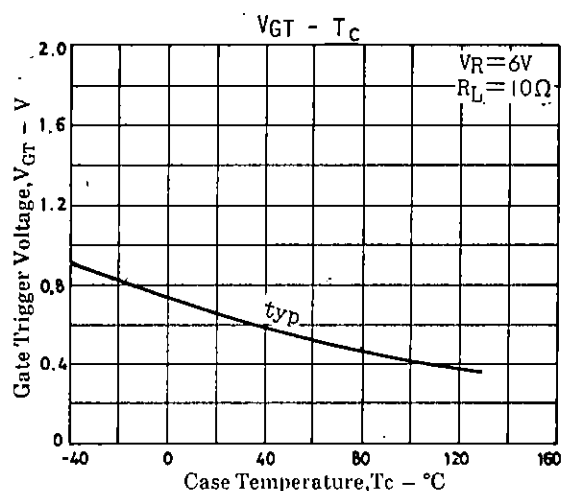
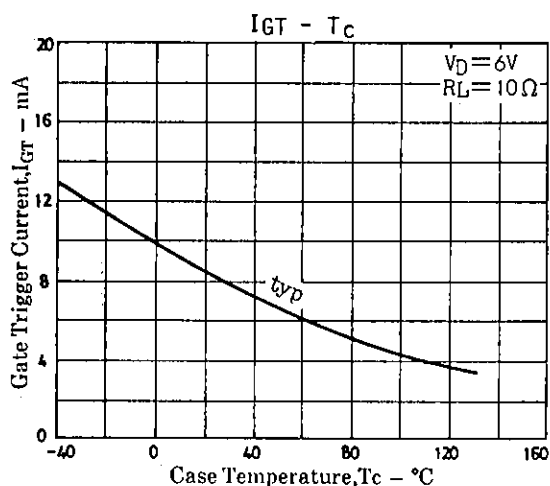
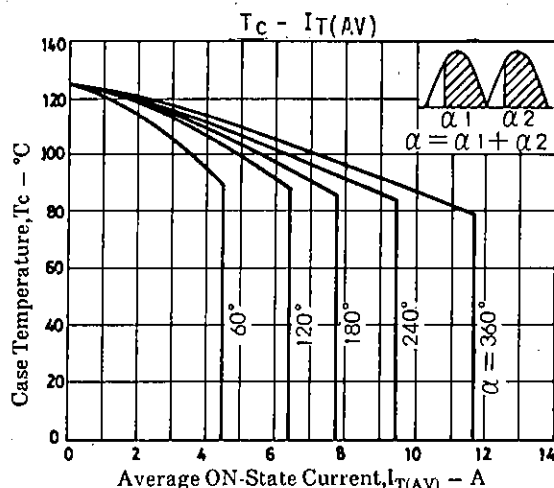
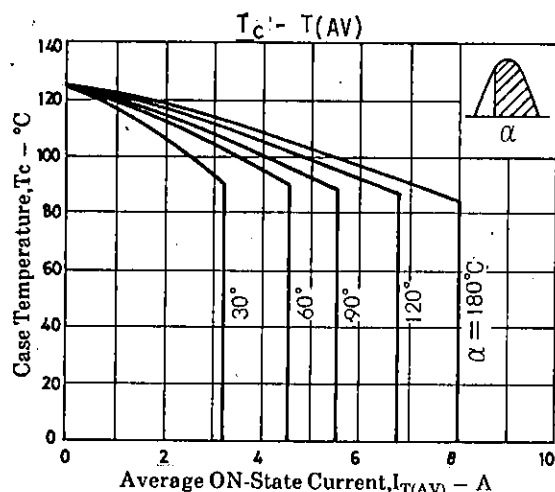
(unit: mm)

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