

<b>SANYO</b>	No.1874B	<b>DTA6-N</b>
		Silicon Planar Type
<b>6A Bidirectional Thyristor</b>		

**Features**

- Peak OFF-state voltage : 200 to 600V
- RMS ON-state current : 6A
- TO-220 package

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

		DTA6C-N	DTA6E-N	DTA6G-N	unit
Repetitive Peak OFF-State Voltage	$V_{DRM}$	200	400	600	V
RMS ON-State Current	$I_{T(RMS)}$	Tc=104°C, single-phase full-wave		6	A
Surge ON-State Current	$I_{TSM}$	Peak 1 cycle,50Hz		60	A
Amperes Squared-Seconds	$f_i^2 T \cdot dt$	1ms ≤ t ≤ 10ms		18	A <sup>2</sup> s
Peak Gate Power Dissipation	$P_{GM}$	f ≥ 50Hz, duty ≤ 10%		5	W
Average Gate Power Dissipation	$P_{G(AV)}$			0.5	W
Peak Gate Current	$I_{GM}$	f ≥ 50Hz, duty ≤ 10%		±2	A
Peak Gate Voltage	$V_{GM}$	f ≥ 50Hz, duty ≤ 10%		±10	V
Junction Temperature	Tj			125	°C
Storage Temperature	Tstg			-40 to +125	°C
Weight				1.8	g

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

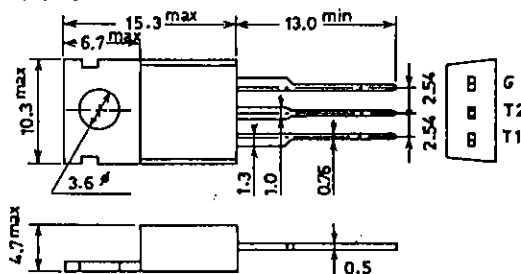
			min	typ	max	unit
Repetitive Peak OFF-State Current	$I_{DRM}$	Tj=125°C, VD=VDRM			2	mA
Peak ON-State Voltage	$V_{TM}$	ITM=9A			1.5	V
Critical Rate of Rise of OFF-State Voltage	(dv/dt)C	Tj=125°C, VD=200V (C), 400V (E to G)	10			V/μs
Holding Current	$I_H$	RL=100Ω			50	mA
Gate Trigger Current (I)	$I_{GT}$	VD=12V, RL=20Ω			30	mA
(II)	$I_{GT}$	VD=12V, RL=20Ω			30	mA
(III)	$I_{GT}$	VD=12V, RL=20Ω			50	mA
(IV)	$I_{GT}$	VD=12V, RL=20Ω			30	mA
Gate Trigger Voltage (I)	$V_{GT}$	VD=12V, RL=20Ω			2	V
(II)	$V_{GT}$	VD=12V, RL=20Ω			2	V
(III)	$V_{GT}$	VD=12V, RL=20Ω			2	V
(IV)	$V_{GT}$	VD=12V, RL=20Ω			2	V
Gate Nontrigger Voltage	$V_{GD}$	Tc=125°C, VD=Rated voltage	0.2			V
Thermal Resistance	Rth(j-c)	Between junction and case, AC			2.5	°C/W

※ : The gate trigger mode is shown below.

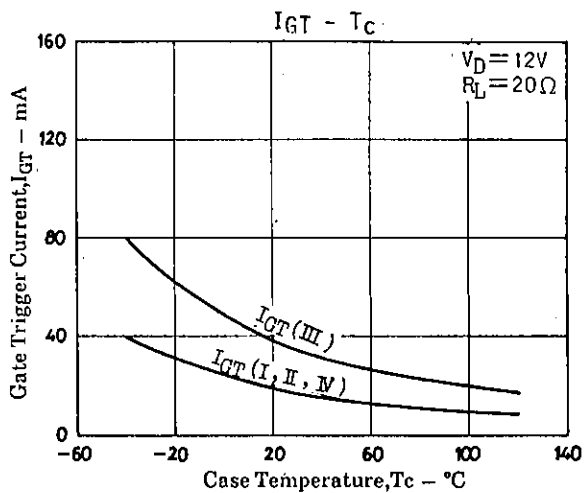
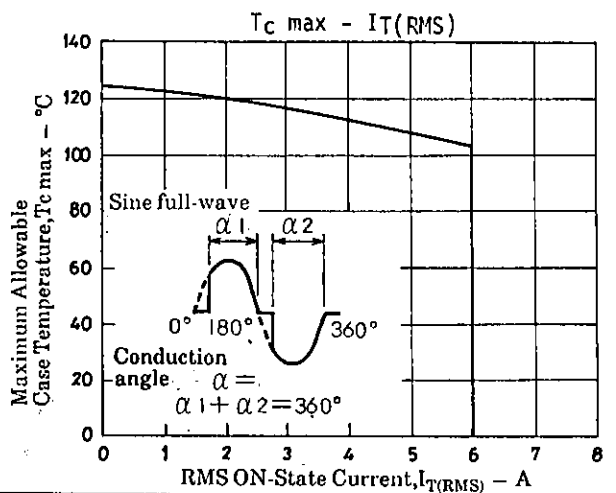
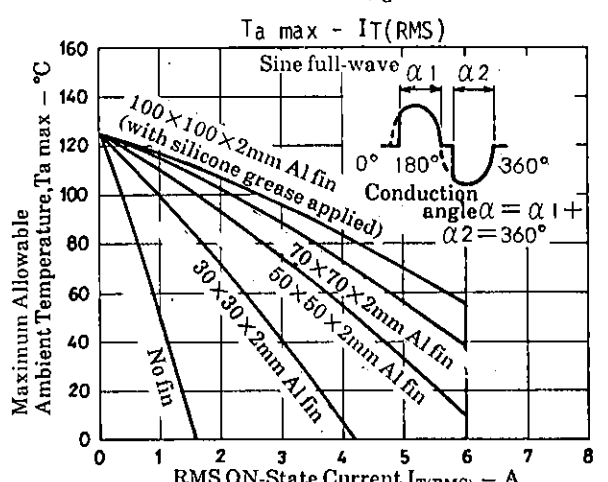
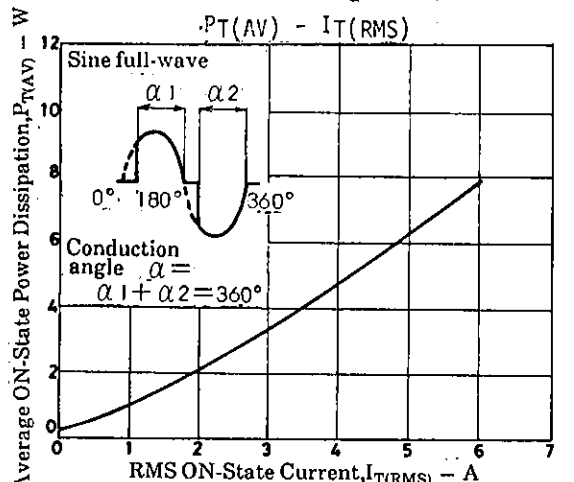
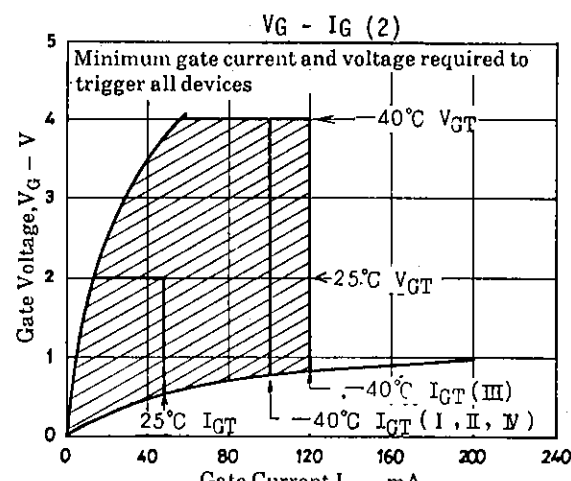
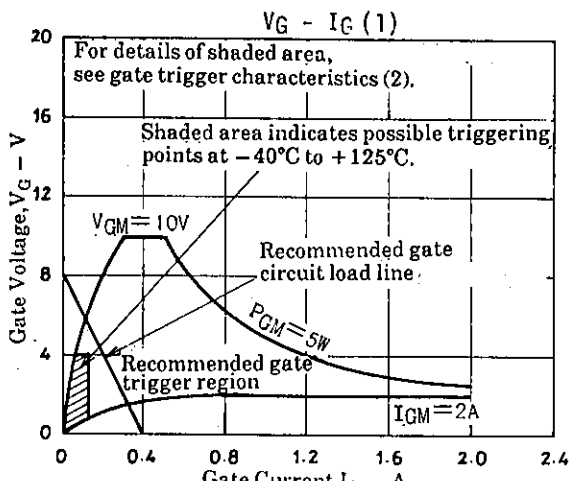
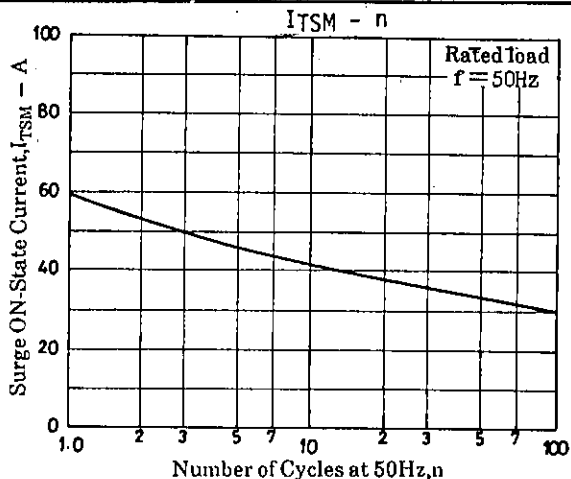
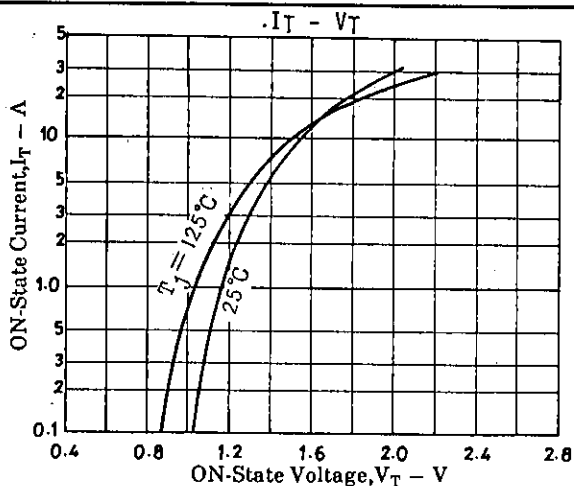
Trigger mode	T2	T1	G
I	+	-	+
II	+	-	-
III	-	+	+
IV	-	+	-

**Package Dimensions 1155**

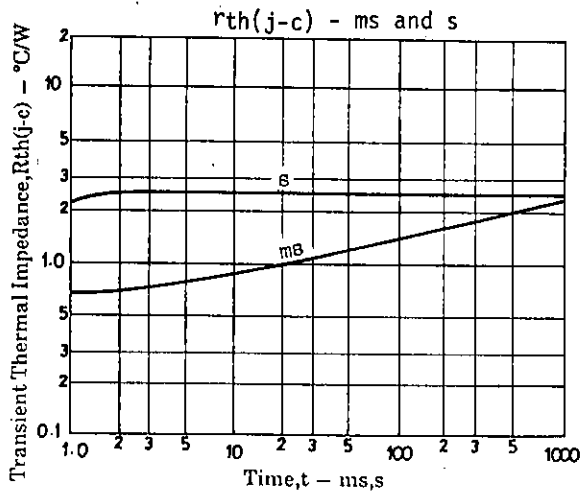
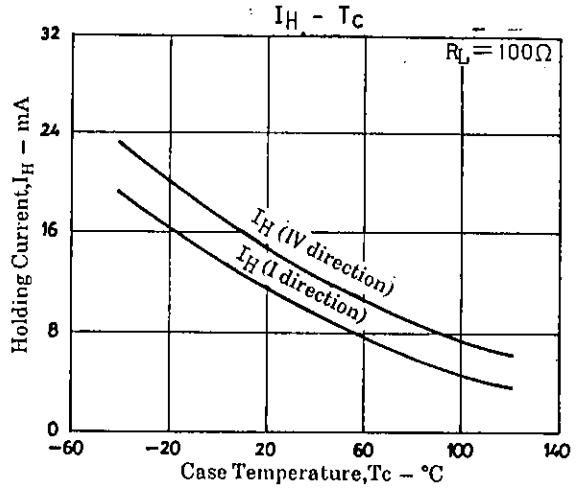
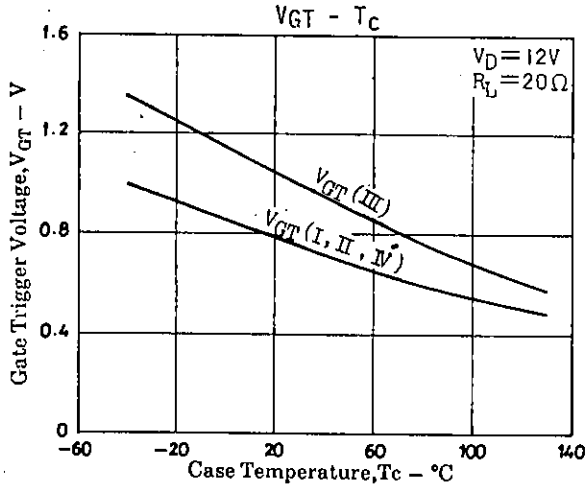
(unit: mm)



DTA6-N



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