

<b>SANYO</b>	No.2283A	<b>DTA1</b>
		Silicon Planar Type
<b>1.0A Bidirectional Thyristor</b>		

**Features**

- Low AC power control use
- Peak OFF-state voltage : 200 to 400V
- RMS ON-state current : 1A
- TO-92 package

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

			DTA1C	DTA1E	unit
Repetitive Peak OFF-State Voltage	$V_{DRM}$		200	400	V
RMS ON-State Current	$I_{T(RMS)}$	$T_c = 74^\circ C$ , single-phase full-wave	→	1.0	A
Surge ON-State Current	$I_{TSM}$	Peak 1 cycle, 50Hz	→	8	A
Amperes Squared-Seconds	$\int i^2 T \cdot dt$	$1ms \leq t \leq 10ms$	→	0.32	A <sup>2</sup> s
Peak Gate Power Dissipation	$P_{GM}$	$f \geq 50Hz, duty \leq 10\%$	→	1	W
Average Gate Power Dissipation	$P_{G(AV)}$		→	0.1	W
Peak Gate Current	$I_{GM}$	$f \geq 50Hz, duty \leq 10\%$	→	$\pm 0.5$	A
Peak Gate Voltage	$V_{GM}$	$f \geq 50Hz, duty \leq 10\%$	→	$\pm 6$	V
Junction Temperature	$T_j$		→	125	°C
Storage Temperature	$T_{stg}$		→	-40 to +125	°C
Weight			→	0.2	g

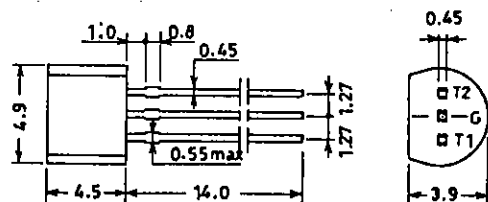
**Electrical Characteristics at Ta=25°C**

			min	typ	max	unit
Repetitive Peak OFF-State Current	$I_{DRM}$	$T_j = 25^\circ C, V_D = V_{DRM}$			10	$\mu A$
Peak ON-State Voltage	$V_{TM}$	$I_{TM} = 1.5A$			1.5	V
Holding Current	$I_H$	$V_D = 12V, gate\ open$			10	mA
Gate Trigger Current※ (I)	(I)	$V_D = 12V, R_L = 20\Omega$			5	mA
	(II)	$V_D = 12V, R_L = 20\Omega$			5	mA
	(III)	$V_D = 12V, R_L = 20\Omega$		10		mA
	(IV)	$V_D = 12V, R_L = 20\Omega$			5	mA
Gate Trigger Voltage※ (I)	(I)	$V_D = 12V, R_L = 20\Omega$			2	V
	(II)	$V_D = 12V, R_L = 20\Omega$			2	V
	(III)	$V_D = 12V, R_L = 20\Omega$		2	-	V
	(IV)	$V_D = 12V, R_L = 20\Omega$			2	V
Gate Nontrigger Voltage	$V_{GD}$	$T_c = 125^\circ C, V_D = V_{DRM}$	0.2		-	V
Thermal Resistance	$R_{th(j-c)}$	Between junction and case, AC				40°C/W

※ : The gate trigger mode is shown below.

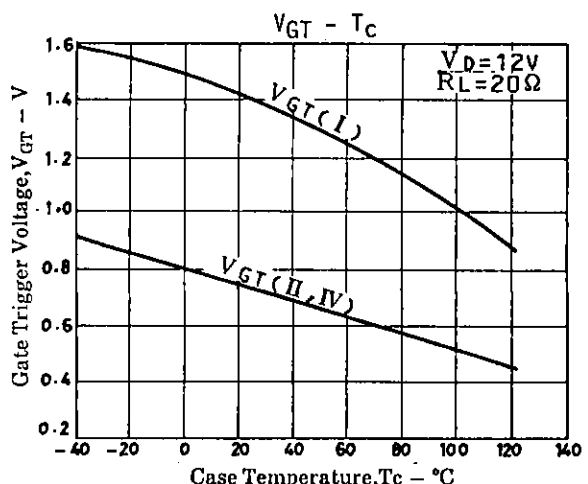
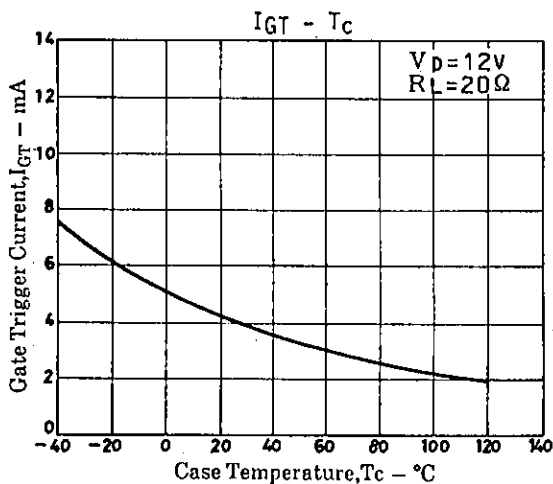
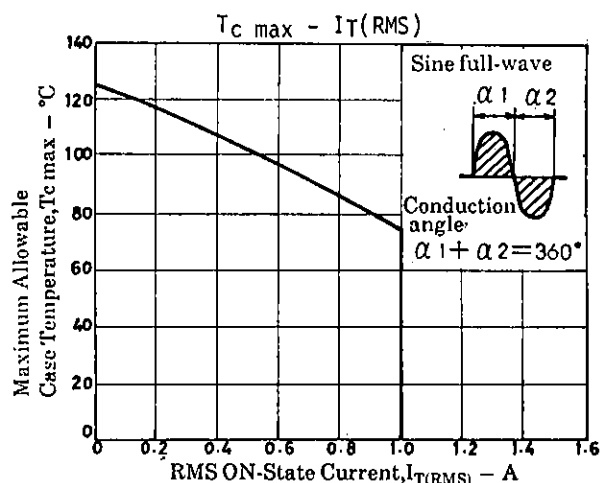
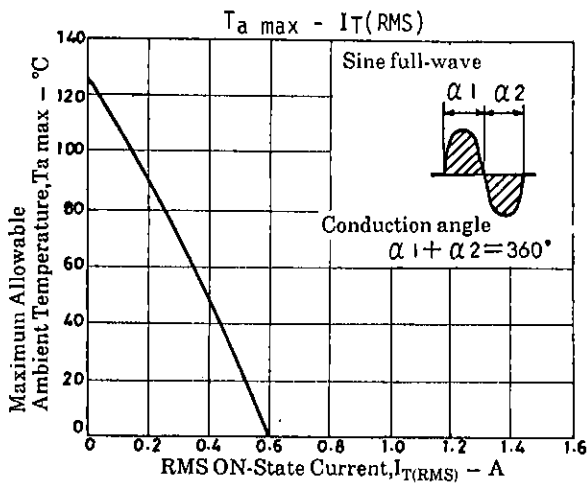
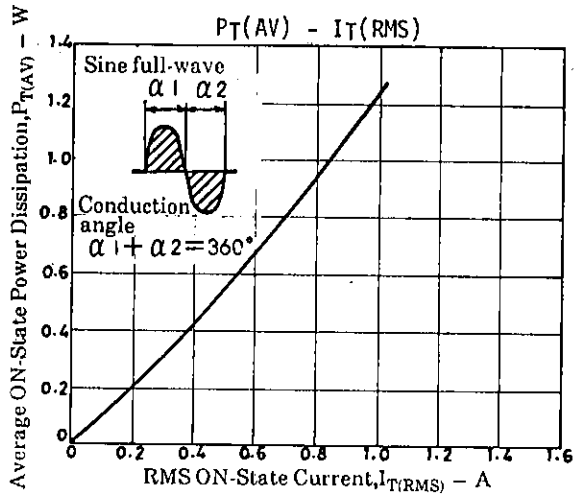
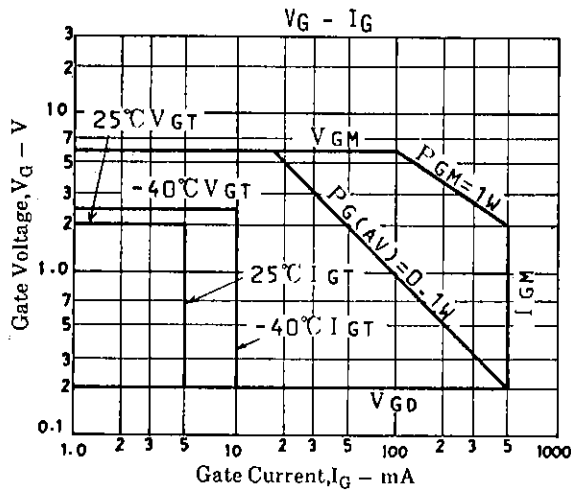
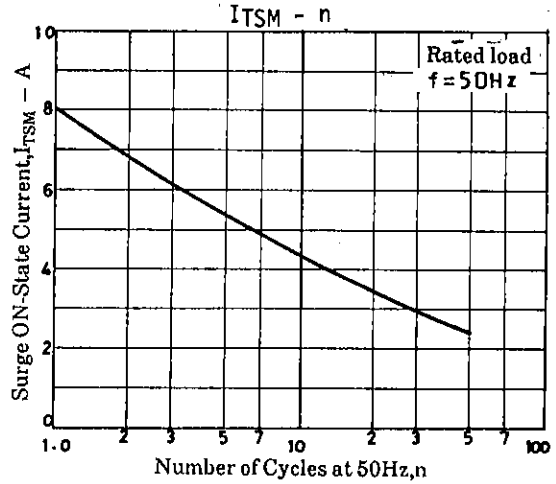
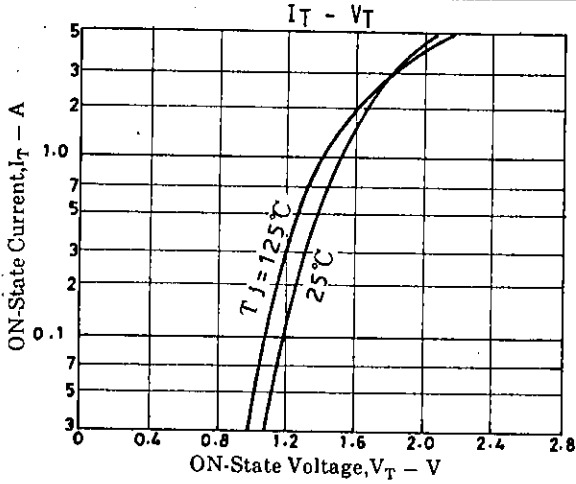
Trigger mode	T2	T1	G
I	+	-	+
II	+	-	-
III	-	+	+
IV	-	+	-

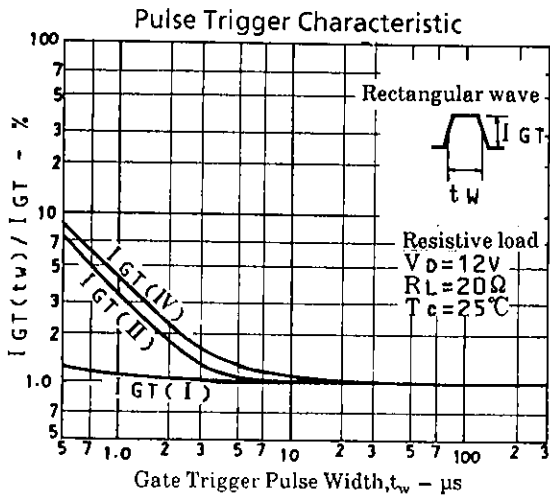
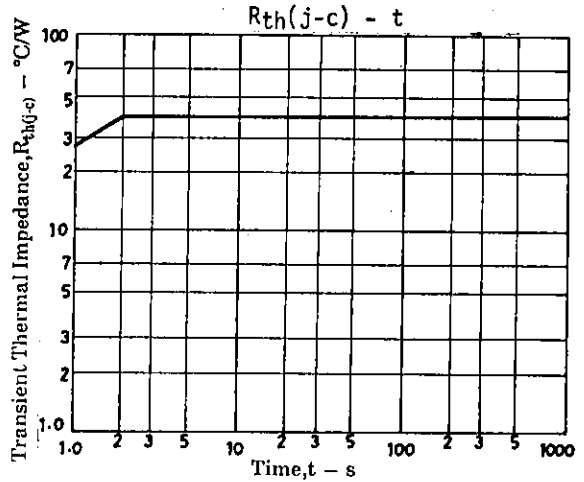
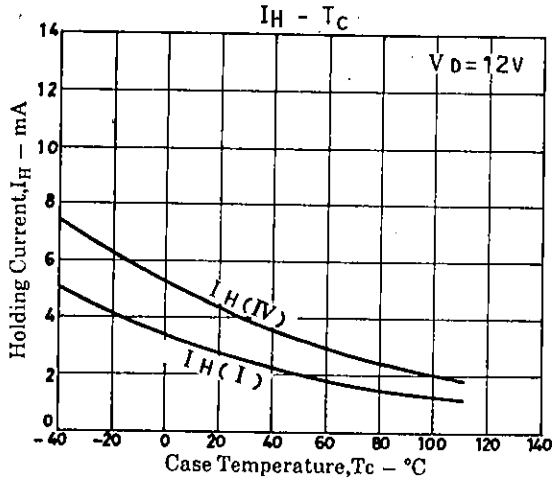
**Package Dimensions 1192A**  
(unit: mm)



G: Gate

DTA1





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