

SANYO	No.799D	DTA-05
		Silicon Planar Type 0.5A Bidirectional Thyristor

Features

- Low AC power control
- Small size and light weight : 0.2g
- Peak OFF-state voltage : 100 to 400V
- RMS ON-state current : 0.5A
- TO-92 package

Absolute Maximum Ratings at Ta = 25°C

		DTA05B	DTA05C	DTA05E	unit
Repetitive Peak OFF-State Voltage	V _{DRM}	100	200	400	V
RMS ON-State Current	I _{T (RMS)}	Ta = 20°C, single-phase full-wave Peak 1 cycle, 50Hz		0.5	A
Surge ON-State Current	I _{TSM}	→	→	6	A
Amperes Squared-Seconds	i ² T-dt	→	→	0.18	A ² s
Peak Gate Power Dissipation	P _{GM}	→	→	1	W
Average Gate Power Dissipation	P _{G(AV)}	→	→	0.1	W
Peak Gate Current	I _{GM}	→	→	0.5	A
Peak Gate Voltage	V _{GM}	→	→	6	V
Junction Temperature	T _j	→	→	110	°C
Storage Temperature	T _{stg}	→	→	-25 to +110	°C

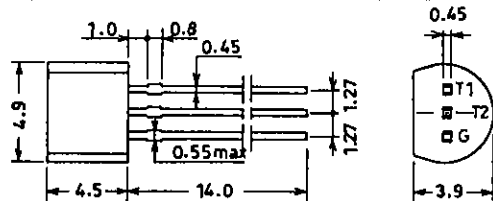
Electrical Characteristics at Ta = 25°C

			min	typ	max	unit
Repetitive Peak OFF-State Current	I _{DRM}	T _j = 110°C, V _D = V _{DRM}			0.1	mA
ON-State Voltage	V _T	I _T = 2A			2.0	V
Holding Current	I _H	R _L = 100Ω			25	mA
Gate · Trigger Current ※ (I)	I _{GT}	V _D = 12V, R _L = 20Ω			15	mA
" (II)	I _{GT}	V _D = 12V, R _L = 20Ω			15	mA
" (III)	I _{GT}	V _D = 12V, R _L = 20Ω			—	
" (IV)	I _{GT}	V _D = 12V, R _L = 20Ω			15	mA
Gate · Trigger Voltage ※ (I)	V _{GT}	V _D = 12V, R _L = 20Ω			2.3	V
" (II)	V _{GT}	V _D = 12V, R _L = 20Ω			2.3	V
" (III)	V _{GT}	V _D = 12V, R _L = 20Ω			—	
" (IV)	V _{GT}	V _D = 12V, R _L = 20Ω			2.3	V
Gate · Nontrigger Voltage	V _{GD}	T _c = 25°C, V _D = V _{DRM}	0.2			V
Thermal Resistance	R _{th(j-a)}				250	°C/W

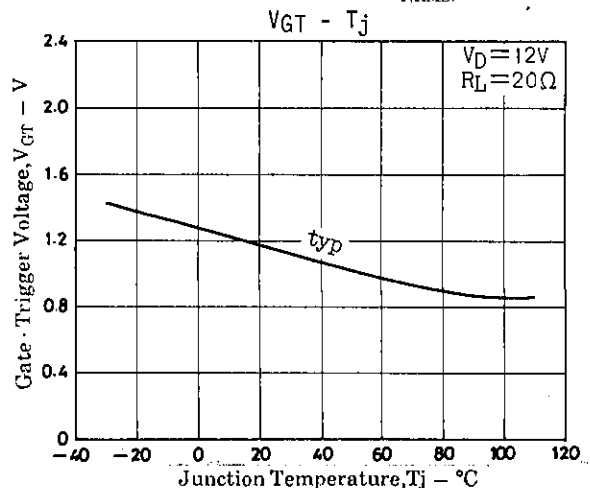
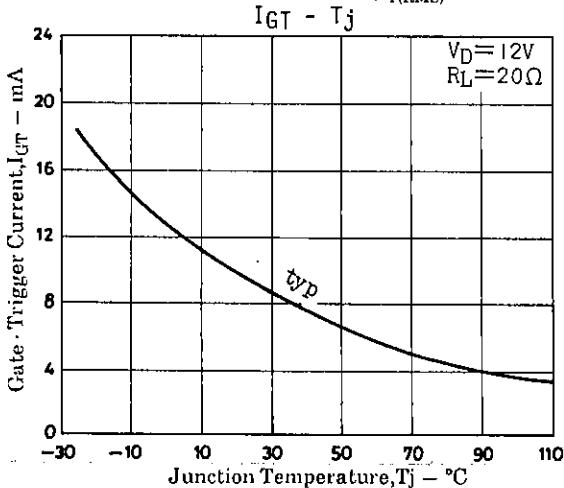
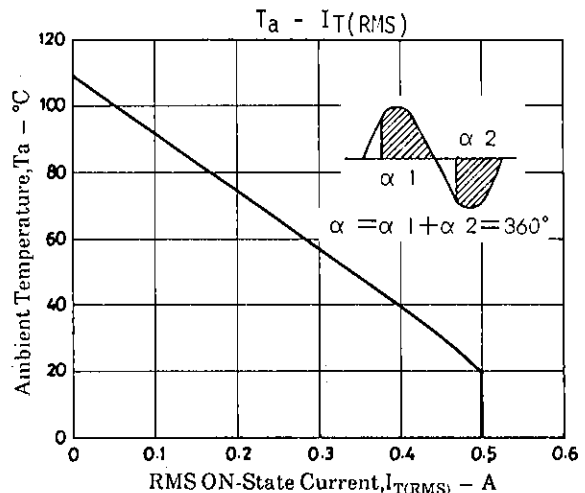
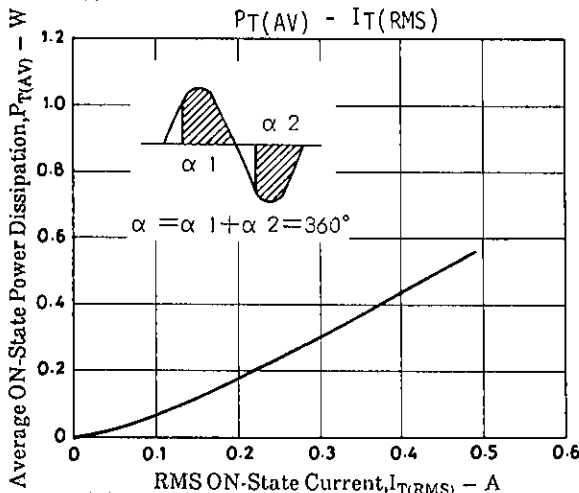
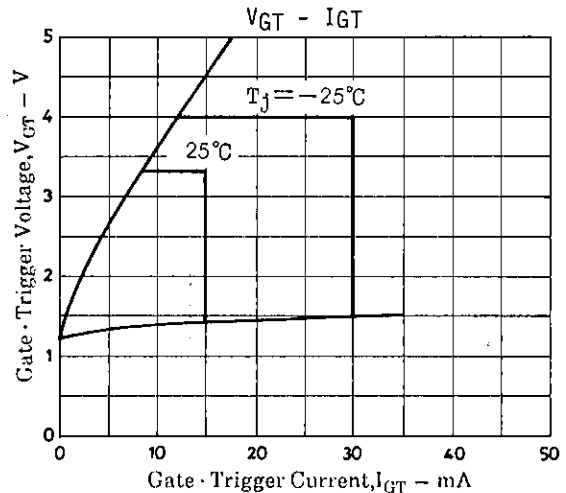
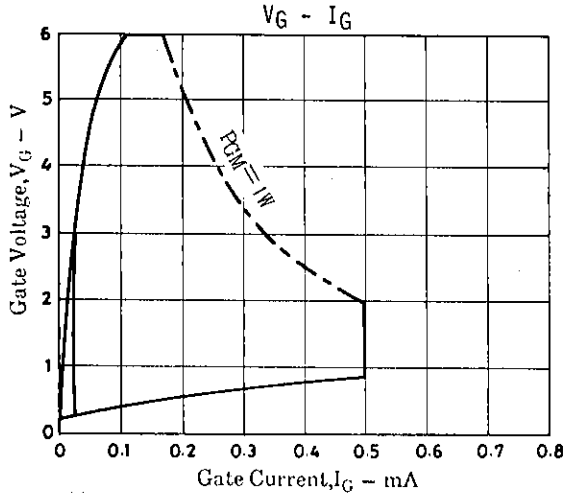
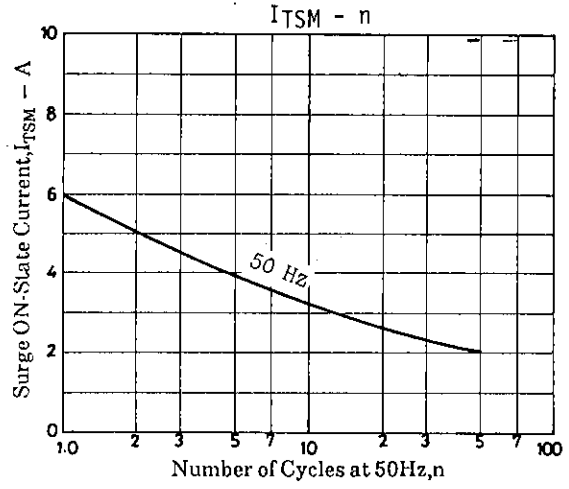
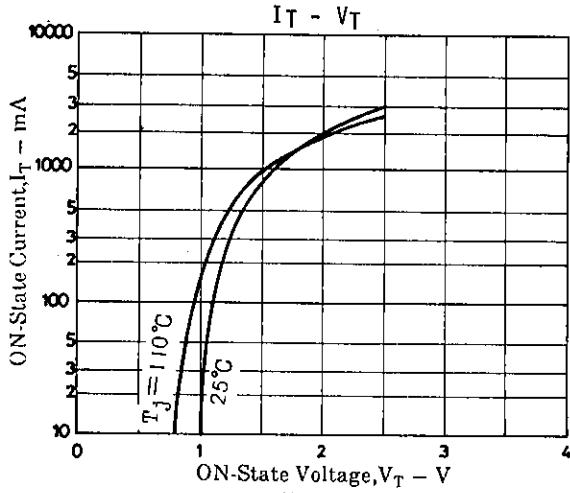
※ : The gate trigger mode is shown below.

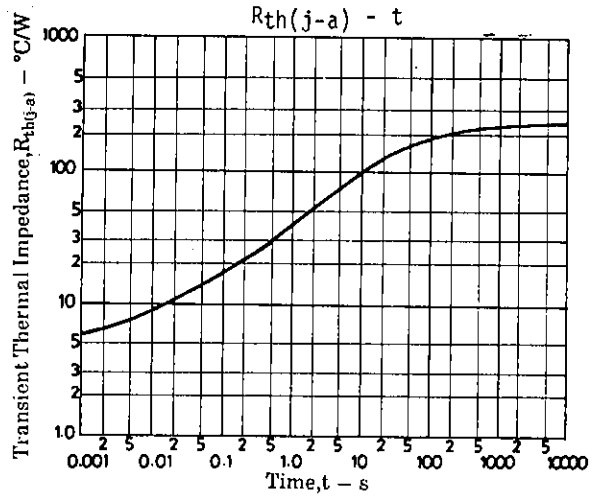
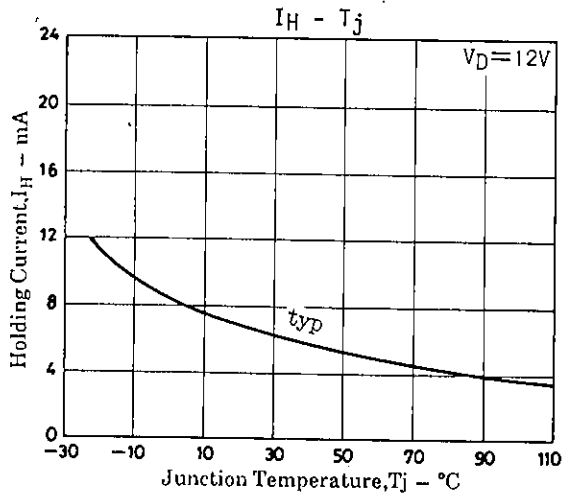
Trigger mode	T2	T1	G
I	+	-	+
II	+	-	-
III	-	+	+
IV	-	+	-

Package Dimensions 1097A
(unit: mm)



G: Gate





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