

	No.1875A	<h1 style="margin: 0;">DTA08E</h1> <p style="margin: 0;">Silicon Planar Type</p> <h2 style="margin: 0;">0.8A Bidirectional Thyristor</h2>
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Features

- Low AC power control
- Peak OFF-state voltage : 400V
- RMS ON-state current : 0.8A
- TO-92 package

Absolute Maximum Ratings at Ta = 25°C

Parameter	Symbol	Conditions	Value	unit
Repetitive Peak OFF-State Voltage	V_{DRM}		-400	V
RMS ON-State Current	I_T (RMS)	Ta = 60°C, single-phase full-wave	0.8	A
Surge ON-State Current	I_{TSM}	Peak 1 cycle, 50Hz	7	A
Amperes Squared-Seconds	$\int i^2 T dt$	1ms ≤ t ≤ 10ms	0.2	A ² s
Peak Gate Power Dissipation	P_{GM}	f ≥ 50Hz, duty ≤ 10%	1	W
Average Gate Power Dissipation	$P_{G(AV)}$		0.1	W
Peak Gate Current	I_{GM}	f ≥ 50Hz, duty ≤ 10%	±1	A
Junction Temperature	T_j		125	°C
Storage Temperature	T_{stg}		-40 to +125	°C
Weight			0.3	g

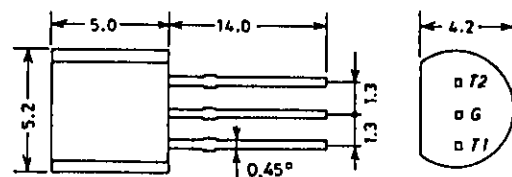
Electrical Characteristics at Ta = 25°C

Parameter	Symbol	Conditions	min	typ	max	unit
Repetitive Peak OFF-State Current	I_{DRM}	Tj = 125°C, V _D = V _{DRM}			0.1	mA
ON-State Voltage	V_T	I _T = 1.2A			1.5	V
Critical Rate of Rise of OFF-State Voltage	(dv/dt) _c	Tj = 125°C, V _D = V _{DRM}	1			V/μs
Holding Current	I_H	V _D = 24V		5	10	mA
Gate · Trigger Current ※ (I)	I_{GT}	V _D = 12V, R _L = 100Ω			5	mA
" (II)	I_{GT}	V _D = 12V, R _L = 100Ω			10	mA
" (III)	I_{GT}	V _D = 12V, R _L = 100Ω			10	mA
" (IV)	I_{GT}	V _D = 12V, R _L = 100Ω			5	mA
Gate · Trigger Voltage ※ (I)	V_{GT}	V _D = 12V, R _L = 100Ω			1	V
" (II)	V_{GT}	V _D = 12V, R _L = 100Ω			1.5	V
" (III)	V_{GT}	V _D = 12V, R _L = 100Ω			1.5	V
" (IV)	V_{GT}	V _D = 12V, R _L = 100Ω			1	V
Gate · Nontrigger Voltage	V_{GD}	Tj = 125°C, V _D = 1/2V _{DRM}	0.1			V
Thermal Resistance	R _{th(j-a)}	Between junction and case, AC			75	°C/W

※ : The gate trigger mode is shown below.

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

Package Dimensions 1141
(unit: mm)



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