

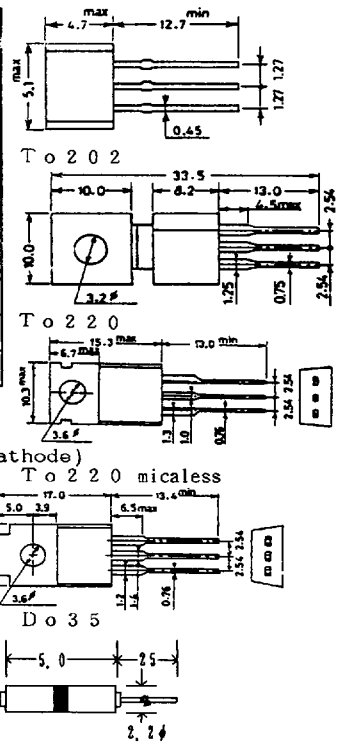
Quick Guide To Thyristors, TRIACs and DIACs

THYRISTORS

IT (AV)	Type No.	Outline	Absolute Maximum Ratings/Ta=25°C				Electrical Characteristics/Ta=25°C										*Rth(j-a)
			V _{RS} (V)	V _{RR} (V)	I _{TSM} (A)	PGM (W)	V _D (V)	I _{GT} max (mA)	V _{GT} max (V)	V _{GD} min (V)	IT (A)	V _T max (V)	typ I _H (mA)	R _{th} (j-c) (°C/W)	* R _{GK} (Ω)		
0.1	DRA01	To92	150 -500	100 -400	4	0.1	6	0.2	0.8	0.2	1	2.5	3	* 250	1k		
0.3	DRA03T				9	0.1		0.2	0.8		2	2	4	* 250	1k		
2	DRA2T	To202	150	100	20	0.1		0.2	0.8		10	2	3	12	1k		
3	DRE3		2	2	60	0.5		0.2	0.8		12	1.6	4	6	330		
	DRD3				60	5		15	1.5		12	1.6	60	3.2	-		
5	DRA5	To220	700	600	80	5		40	1.5		15	1.6	60	3.0	-		
8	DRA8							120	5		40	1.5	25	1.6	60	3.0	-

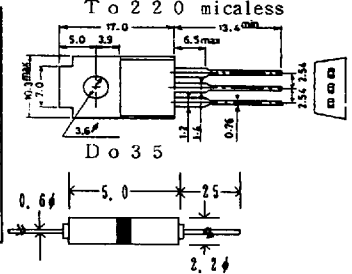
*Note: Connect a resistor of less than RGK in the remarks between a gate and a cathode when an average on current are 0.1-3A.

*Outline (unit:mm)
To 9 2



THYRISTOR WITH RESISTOR (Built-in resistor between gate and cathode)

RGK Typ	IT (AV)	Type No.	Outline	Absolute Maximum Ratings/Ta=25°C				Electrical Characteristics/Ta=25°C							
				V _{RS} (V)	V _{RR} (V)	I _{TSM} (A)	PGM (W)	V _D (V)	I _{GT} max (mA)	V _{GT} max (V)	I _T (A)	V _T max (V)	I _H max (mA)	R _{th} (j-c) max (°C/W)	
(A)	(A)														
1	0.5	DRA05E-1	To92	500	400	9	0.1	6	1	0.8	1	1.5	6	180	
2.7		DRA05E-2							0.4				3		
5.1		DRA05E-5							0.25				2		



TRIACs

IT (RMS) (A)	Type No.	Outline	Absolute Maximum Ratings/Ta=25°C			Electrical Characteristics/Ta=25°C														*Rth(j-a)
			VDRM (V)	ITSM (A)	PGM (W)	IGT max (mA)				VD (V)	VGT max (V)				IT (A)	VT max (V)	IH max (mA)	VGD min (V)	Rth (j-c) (C/W)	
						VD (V)	I	II	III		IV	I	II	III						IV
0.5	DTA05	To92	400	6	1		15	15	—	15		2.3	2.3	—	2.3	2	2	25	0.2	*250
1	DTA1			8	1		5	5	10	5		2	2	—	2	1.5	1.5	10	0.2	40
2	DTA2	To202	600	12	3		15	15	—	15		2.3	2.3	—	2.3	6	2.6	25	0.2	12
3	DTB3			27	3		30	30	—	30		2	2	—	2	4.5	1.5	25	0.2	10
6	DTA6-N	To220	200	60	5	12	30	30	50	30	12	2	2	2	2	9	1.5	50	0.2	2.5
	*DTM6-N			60	5		30	30	50	30		2	2	2	2		1.5	50	0.2	3.8
8	DTC8-N			80	5		30	30	50	30		2	2	2	2	12	1.5	50	0.2	2.0
	*DTM8-N			80	5		30	30	50	30		2	2	2	2		1.5	50	0.2	3.6
10	DTC10-N		600	80	5		30	30	50	30		2	2	2	2	17	1.5	50	0.2	1.8
	*DTM10-N			80	5		30	30	50	30		2	2	2	2		1.5	50	0.2	3.0
12	DTC12-N			120	5		30	30	50	30		2	2	2	2		1.5	50	0.2	1.8
	*DTM12-N			120	5		30	30	50	30		2	2	2	2		1.5	50	0.2	3.0

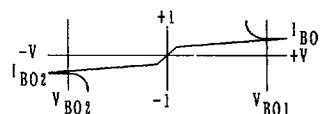
DIACs

Current Rating (A)	Type No.	Outline	Electrical Characteristics/Ta=25°C				
			V _{B01} (V _{B02}) (V)	I _{B01} (I _{B02}) (μA)	Temperature coefficient(%/°C)	V _P (V)	V _{B01} - V _{B02} (V)
± 2	BTD4M	Do35	29 ~ 37	max 50	typ 0.1	min 5	max 3.0

Gate trigger mode of TRIACs

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

Fundamental Characteristics of a DIAC



These specifications are subject to change without notice.