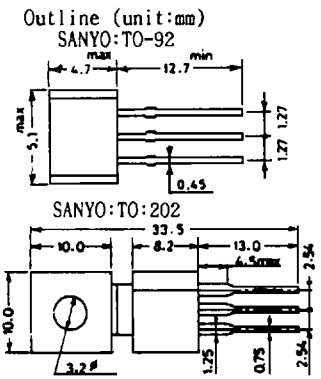


Quick Guide To Thyristors, TRIACs and DIACs

THYRISTORS

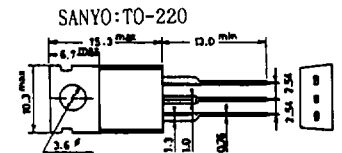
IT (AV) (A)	Type No.	Outline	Absolute Maximum Ratings/Ta=25°C				Electrical Characteristics/Ta=25°C								*Rth(j-a) * Rgk (Ω)		
			V _{RSM} (V)	V _{RRM} (V)	I _{TSM} (A)	PGM (W)	V _D (V)	IGT max (mA)	VGT max (V)	VGD min (V)	IT (A)	VT max (V)	I _H typ (mA)	R _{th} (j-c) (°C/W)			
0.3	DRA03T	TO-92	500	400	9	0.1	6	0.2	0.8	0.2	2	2	4	* 250	1k		
2	DRA2T	TO-202	500, 700	400, 600	20	0.1					0.2	0.8	10	2	3	12	1k
3	DRE3				60	0.5					0.2	0.8	12	1.6	4	6	330
5	DRA5	TO-220	500, 700	400, 600	80	5					40	1.5	15	1.6	60	3	-
8	DRA8				120	5					40	1.5	25	1.6	60	3	-



*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.

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

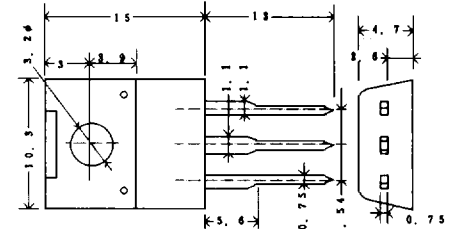
Rgk Typ (A)	IT (AV) (A)	Type No.	Outline	Absolute Maximum Ratings/Ta=25°C				Electrical Characteristics/Ta=25°C						
				V _{RSM} (V)	V _{RRM} (V)	I _{TSM} (A)	PGM (W)	V _D (V)	IGT max (mA)	VGT max (V)	IT (A)	VT max (V)	I _H max (mA)	R _{th} (j-c) max (°C/W)
1	0.5	DRA05E-1	TO-92	500	400	9	0.1	6	1	0.8	1	1.5	6	180
2.7		DRA05E-2							0.4				3	
5.1		DRA05E-5							0.25				2	



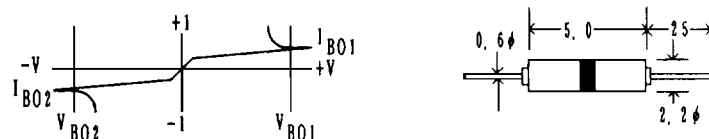
DIACs

Current Rating IP(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

SANYO:TO220ML(Micaless)



Fundamental Characteristics of a DIAC DO 3 5



TRIACs

IT (RMS) (A)	Type No.	Outline	Absolute Maximum Ratings/Ta=25°C			Electrical Characteristics/Ta=25°C														
			V _{DRM} (V)	I _{TSM} (A)	PGM (W)	IGT max (mA)				VGT max (V)				IT (A)	VT max (V)	I _H max (mA)	VGD min (V)	R _{th} (j-c) (°C/W)		
						I	II	III	IV	I	II	III	IV							
1	DTA1	TO-92	400	8	1	12	5	5	10	5	12	2	2	-	2	1.5	1.5	10	0.2	40
2	DTA2	TO-202	400	12	3		15	15	-	15		2.3	2.3	-	2.3	6	2.6	25		12
3	DTB3		600	27	3		30	30	-	30		2	2	-	2	4.5	1.5	25		10
6	DTN6	TO-220 ML	400, 600	60	5		20	20	-	20		1.5	1.5	-	1.5	9	1.5	50		3.8
8	DTN8			80	5		20	20	-	20		1.5	1.5	-	1.5	12	1.5	50		3.6
12	DTN12			120	5	20	20	-	20	1.5	1.5	-	1.5	17	1.5	50	3			

Gate trigger mode of TRIACs

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

These specifications are subject to change without notice.