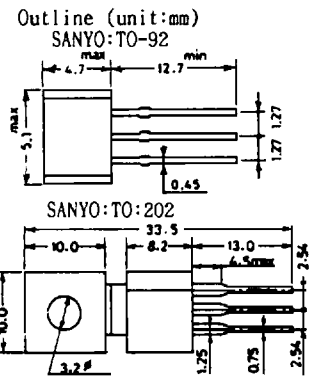


Quick Guide To Thyristors, TRIACs and DIACs

THYRISTORS

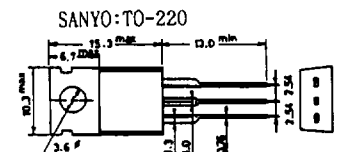
IT (AV)	Type No.	Outline	Absolute Maximum Ratings/Ta=25°C				Electrical Characteristics/Ta=25°C										*Rth(j-a)
			VRSM (V)	VRRM (V)	ITSM (A)	PGM (W)	VD (V)	IGT max (mA)	VGT max (V)	VGD min (V)	IT (A)	VT max (V)	typ IH (mA)	Rth (j-c) (°C/W)	* RGK (Ω)		
0.3	DRA03T	TO-92	500	400	9	0.1	6	0.2	0.8	0.2	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			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)

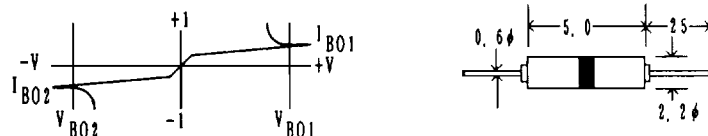
Rgk Typ	IT (AV)	Type No.	Outline	Absolute Maximum Ratings/Ta=25°C				Electrical Characteristics/Ta=25°C						
				V _{RS} M	V _{RR} M	I _{TSM}	PGM	V _D (V)	I _{GT} max (mA)	V _{GT} max (V)	I _T (A)	V _T max (V)	I _H max (mA)	R _{th} — (j-c) max (°C/W)
(A)	(A)			(V)	(V)	(A)	(W)							
1	0.5	DRA05E-1	TO-92	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	



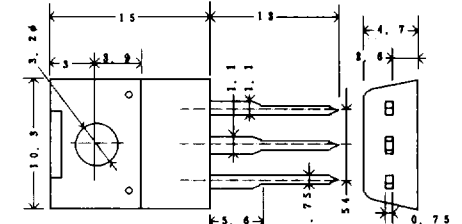
DIACs

Current Rating IP(A)	Type No.	Outline	Electrical Characteristics/Ta=25°C				
			VBO1(VBO2) (V)	IBO1(IBO2) (μA)	Temperature coefficient (%/°C)	VP(V)	VBO1 - VBO2 (V)
± 2	BTD4M	Do35	29 ~ 37	max 50	typ 0.1	min 5	max 3

Fundamental Characteristics of a DIAC DO 35



SANYO:TO220ML(Micaless)



TRIACs

IT (RMS) (A)	Type No.	Outline	Absolute Maximum Ratings/Ta=25°C			Electrical Characteristics/Ta=25°C																
			VDRM (V)	ITSM (A)	PGM (W)	IGT max (mA)				VGT max (V)				VT max (V)	IH max (mA)	VGD min (V)	Rth (j-c) (°C/W)					
						VD (V)	I	II	III	IV	VD (V)	I	II					III	IV	IT (A)		
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.