

MEDIUM POWER THYRISTORS & TRIACS < 100 A

STANDARD THYRISTORS METAL CASE

Type See NOTE	I _O (A)	V _{RRM} = V _{DRM} (V)	I _{TSM} (A)	I _{RM} @ V _{RRM} I _{DM} @ V _{DRM} T _j max max (mA)	T _{amb} = 25°C					dv/dt @ 67% V _{DRM} T _j max min (V/μs)	di/dt max (A/μs)	Package
					V _{GT} max (V)	I _{GT} max (mA)	I _H max (mA)	V _{TM} / I _{TM} max (V) (A)				

7.4 Arms / T_{case} = 90°C T_j = 125°C I²t = 32 A²s

2N 1770 → 2N 1778 2N 2619	4.7	25 → 500 600	80	2	1.5	15	30	1.85	15	200	50	TO 64*
------------------------------	-----	-----------------	----	---	-----	----	----	------	----	-----	----	--------

25 Arms / T_{case} = 75°C T_j = 125°C I²t = 200 A²s

BTW 39-50 → 1200	16	50 → 1200	200	5	1.5	80	20 §	2.2	50	200	100	TO 48**
------------------	----	-----------	-----	---	-----	----	------	-----	----	-----	-----	---------

25 Arms / T_{case} = 70°C T_j = 125°C I²t = 200 A²s

2N 681 2N 682 2N 683 2N 685 2N 687 2N 688 2N 689 2N 690 2N 691 2N 692	16	25 50 100 200 300 400 500 600 700 800	200	3	1.5	40	20 §	2	50	200	20	TO 48**
--	----	--	-----	---	-----	----	------	---	----	-----	----	---------

35 Arms / T_{case} = 75°C T_j = 125°C I²t = 545 A²s

2N 5204 → 2N 5207	22.5	600 → 1200	330	3.3	1.5	40	100	2.3	70	200	100	TO 48**
-------------------	------	------------	-----	-----	-----	----	-----	-----	----	-----	-----	---------

50 Arms / T_{case} = 85°C T_j = 125°C I²t = 1250 A²s

BTW 48-200 → 1200	32	200 → 1200	500	5	1.5	60	30 §	1.8	100	200	100	TO 48**
-------------------	----	------------	-----	---	-----	----	------	-----	-----	-----	-----	---------

63 Arms / T_{case} = 105°C T_j = 125°C I²t = 4150 A²s

BTW 50-100 → 1200	40	100 → 1200	910	12	1.5	150	50 §	3	500	200	100	TO 65***
-------------------	----	------------	-----	----	-----	-----	------	---	-----	-----	-----	----------

NOTE: ORDERING INFORMATION - EXAMPLE: BTW 48-600, 2N 5205 for 800 V. * 10-32 UNF. ** 1/4"-28 UNF - M6 thread available on request → Type number + suffix M. *** 1/4"-28 UNF.
§ : Typical value.

PLASTIC AND METAL CASE THYRISTORS FOR OVERVOLTAGE PROTECTION

Type	I _O (A)	V _{RRM} = V _{DRM} (V)	I _{TSM} (A)	I _{RM} * @ V _{RRM} I _{DM} * @ V _{DRM} max (mA)	T _{amb} = 25°C					dv/dt* @ V _{DRM} min (V/μs)	Package
					V _{GT} max (V)	I _{GT} max (mA)	I _H max (mA)	V _{TM} / I _{TM} max (V) (A)	di/dt max (A/μs)		

12 Arms / T_{case} = 75°C T_j = 125°C I²t (10 ms) = 450 A²s

TYP 212 TYP 512 TYP 1012 TYP 2012	8	25 50 100 200	300 10ms 750 1ms expo	2	1.5	30	50	1.5	50	100	200	TO 220 AB
--	---	------------------------	--------------------------------	---	-----	----	----	-----	----	-----	-----	-----------

25 Arms / T_{case} = 75°C T_j = 125°C I²t (10 ms) = 2450 A²s

TSP 225 TSP 525 TSP 1025	16	25 50 100	700 10 ms 145 250ms	10	1.5	50	50	1.5	140	100	200	TO 48**
--------------------------------	----	-----------------	------------------------------	----	-----	----	----	-----	-----	-----	-----	---------

* @ T_j max. ** 1/4"-28 UNF - M6 thread available on request → Type number + suffix M.