

# Thyristors

## Phase Control Type

25-80 Amps RMS

**International**  
**IOR Rectifier**

Part Number	VRRM VDRM (V)	IT(RMS) (A)	IT(AV) @ Tc		ITSM (1)		VGT (2) (V)	IGT (2) (mA)	VTM (3) (V)	dv/dt (4) (V/μs)	RthJC DC (°C/W)	Case Outline Number (8)	Notes	Case Style																																							
			(A)	(°C)	50 Hz (A)	60 Hz (A)																																															
10RIA10 10RIA20 10RIA40 10RIA60 10RIA80 10RIA100 10RIA120	100 200 400 600 800 1000 1200	25	10	85	190	200	2.0	60	1.75	300	1.85	T1	(5) (6)	TO-208AA (TO-48)																																							
2N681 2N682 2N683 2N684 2N685 2N686 2N687 2N688 2N689 2N690 2N691 2N692	25 50 100 150 200 250 300 400 500 600 700 800														25	16	65	145	150	2.0	40	2.00	250	1.50	T1	(6)																											
16RIA10 16RIA20 16RIA40 16RIA60 16RIA80 16RIA100 16RIA120 16RIA140 16RIA160	100 200 400 600 800 1000 1200 1400 1600																											35	16	85	285	300	2.0	60	1.75	300	1.15	T1	(5) (6)														
																																									80 80	190 190	200 200	1.80 1.80									
2N5204 2N5205 2N5206 2N5207	600 800 1000 1200																											35	22	40	285	300	2.0	40	2.30	250	1.50	T1	(6)														
22RIA10 22RIA20 22RIA40 22RIA60 22RIA80 22RIA100 22RIA120 22RIA140 22RIA160	100 200 400 600 800 1000 1200 1400 1600																																								35	22	85	335	355	2.0	60	1.70	300	0.86	T1	(5) (6)	
25RIA10 25RIA20 25RIA40 25RIA60 25RIA80 25RIA100 25RIA120 25RIA140 25RIA160	100 200 400 600 800 1000 1200 1400 1600	40	25	85	350	370	2.0	60	1.70	300	0.75	T1	(5) (6)																																								
																												80 80	335 335	355 355	1.80 1.80																						
50RIA10 50RIA20 50RIA40 50RIA60 50RIA80 50RIA100 50RIA120 50RIA140 50RIA160	100 200 400 600 800 1000 1200 1400 1600																											80	50	94	1200	1255	2.5	100	1.60	500	0.35	T3	(6) (7)	TO-208AC (TO-65)													
		900 900	942 942																																																		



(1) 100% VRRM reapplied @  $T_j = T_j \text{ max. } 125^\circ\text{C}$ .

(8) For case outline drawing see page 154.

(2)  $T_j = 25^\circ\text{C}$ .

(3)  $\pi \times I_T(\text{AV}) @ T_j = 25^\circ\text{C}$ .

(4) Exponential to 0.67 VDRM;  $T_j = 125^\circ\text{C}$ .

(5) Leaded version available, to specify add "1" to second digit in part number (e.g., 11RIA10, 17RIA10, 23RIA10), outline T2.

(6) Available with metric stud; to specify add "M" to the end of part number (e.g., 25RIA120M, 50RIA120M).

(7) Leaded version available, to specify add "1" to second digit in part number (e.g., 51RIA10), outline T4.