







General-Purpose Rectifiers

Motorola offers a wide variety of low-cost devices, packaged to meet diverse mounting requirements. Avalanche capability is available in the axial lead 1.5, 3.0 and 6.0 amp packages, shown below, to provide protection from transients.

All devices are connected cathode-to-case or cathode-to-heatsink, where applicable. Reverse polarity may be available on some devices upon special request. Contact your Motorola representative for more information.

Table 7 — General-Purpose Rectifiers

V_{RRM} (Volts)	I_O , AVERAGE RECTIFIED FORWARD CURRENT (Amperes) ⁽¹⁾						
	1	3		6	12	20	24
	59-03 (DO-41) Plastic Cathode = Polarity Band 	60-01 Metal Style 1 	267-03 Plastic Cathode = Polarity Band 	194-04 Plastic Style 1 	245A-02 (DO-203AA) Metal Style 2 		339-02 Plastic ⁽⁴⁾ Style 1 
50	1N4001 ⁽³⁾	1N4719	1N5400	MR750	MR1120 1N1199,A,B	MR2000	MR2400
100	1N4002 ⁽³⁾	1N4720	1N5401	MR751	MR1121 1N1200,A,B	MR2001	MR2401
200	1N4003 ⁽³⁾	1N4721	1N5402	MR752	MR1122 1N1202,A,B	MR2002	MR2402
400	1N4004⁽³⁾	1N4722	1N5404	MR754	MR1124 1N1204,A,B	MR2004	MR2404
600	1N4005 ⁽³⁾	1N4723	1N5406	MR756	MR1126 1N1206,A,B	MR2006	MR2406
800	1N4006 ⁽³⁾	1N4724		MR758	MR1128	MR2008	
1000	1N4007⁽³⁾	1N4725		MR760	MR1130	MR2010	
I_{FSM} (Amps)	30	300	200	400	300 ⁽⁹⁾	400	400
T_A @ Rated I_O (°C)	75	75	$T_L = 105$	60			
T_C @ Rated I_O (°C)					150	150	125
T_J (Max) (°C)	175	175	175	175	190	175	175

⁽¹⁾ I_O is total device output.

⁽³⁾ Package Size: 0.120" max diameter by 0.260" max length

⁽⁴⁾ Meets mounting configurations of TO-220 outline.



⁽⁹⁾ I_{FSM} is for MR1120 series. 1N1199 = 100, -A = 240, -B = 250.

Devices listed in bold, italic are Motorola preferred devices.

* Not recommended for new designs.

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Table 7 — General-Purpose Rectifiers (continued)

V_{RRM} (Volts)	I_O , AVERAGE RECTIFIED FORWARD CURRENT (Amperes) ⁽¹⁾			
	25	30		40
	193-04 Plastic ⁽¹⁰⁾ Cathode = Polarity Band 	1-07 (TO-204AA) Metal Styles 8 and 9 		
50	MR2500			1N1183A
100	MR2501	<i>MR4422CT</i>	<i>MR4422CTR</i>	1N1184A
200	MR2502			1N1186A
400	<i>MR2504</i>			1N1188A
600	MR2506			<i>1N1190A</i>
800	MR2508			
1000	<i>MR2510</i>			
I_{FSM} (Amps)	400	400	400	800
T_A @ Rated I_O (°C)				
T_C @ Rated I_O (°C)	150			150
T_J (Max) °C	175	150	150	190

⁽¹⁾ I_O is total device output.

⁽¹⁰⁾ Request data sheet for mounting information.

Devices listed in bold, italic are Motorola preferred devices.