


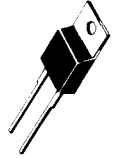
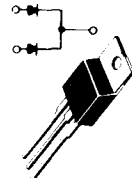
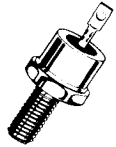
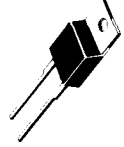
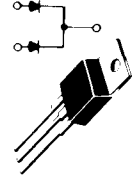
There are many other standard features in Motorola Schottky rectifiers that give added performance and reliability.

1. GUARDRINGS are included in all Schottky die for reverse voltage stress protection from high rates of dv/dt to virtually eliminate the need for snubber networks. The guarding also operates like a zener and avalanches when subjected to voltage transients.

2. MOLYBDENUM DISCS on both sides of the die minimize fatigue from power cycling in all metal products. The plastic TO-220 devices have a special solder formulation for the same purpose.

3. QUALITY CONTROL monitors all critical fabrication operations and performs selected stress tests to assure constant processes.

Table 24. Schottky Rectifiers (continued)

	**I_O, AVERAGE RECTIFIED FORWARD CURRENT (Amperes)						
	8	7.5	10	15		16	20
V_{RRM} (Volts)	60-01 Metal 	221B-01 (TO-220AC) Plastic 		221A-04 (TO-220AB) Plastic 	56-03 (DO-203AA) (DO-4) Metal 	221B-01 (TO-220AC) Plastic 	221A-04 (TO-220AB) Plastic 
15							
20	BYS08-20††				1N5826		
25							
30	BYS08-30††				1N5827		
35		MBR735	MBR1035	MBR1535CT		MBR1635	MBR2035CT
40					1N5828		
45	BYS08-45††	MBR745	MBR1045	MBR1545CT		MBR1645	MBR2045CT
50	BYS08-50††						
60			MBR1060				MBR2060CT
70			MBR1070				MBR2070CT
80			MBR1080				MBR2080CT
90			MBR1090				MBR2090CT
100			MBR10100				MBR20100CT
I_{FSM} (Amps)	400	150	150	150	500	150	150
†T_C @ Rated I_O (°C)	100	105	135	105	85	125	135
†T_L @ Rated I_O (°C)							
T_J (Max) (°C)	150	150	150	150	125	150	150
Max V_F @ I_{FM} = I_O	0.47 T _C = 25°C	0.57 T _C = 125°C	0.57 T _C = 125°C	0.72 @ 15 A T _C = 125°C	*0.5 T _C = 25°C	0.57 T _C = 125°C	0.72 @ 20 A T _C = 125°C

* Values are for the 40 volt units. The lower voltage parts provide lower limits.

** I_O is total device output.

† Must be derated for reverse power dissipation. See Data Sheet.

†† No. CECC 86-819-029.