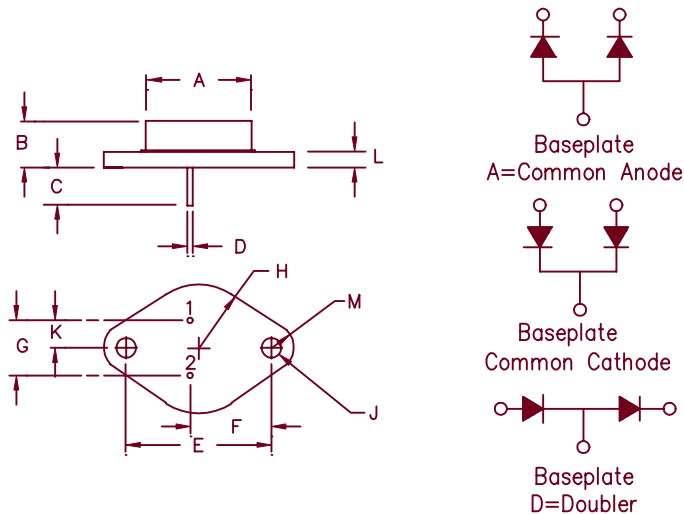


30 Amp Dual Power Rectifiers R702—R716X



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	—	.875	—	22.23	Dia.
B	.250	.450	6.35	11.43	
C	.312	—	7.92	—	Dia.
D	.038	.043	.97	1.09	
E	1.177	1.197	29.90	30.40	Rad.
F	.655	.675	16.64	17.15	
G	.420	.440	10.67	11.18	Dia.
H	—	.525	—	13.34	
J	.151	.161	3.84	4.09	Rad.
K	.205	.225	5.21	5.72	
L	—	.135	—	3.43	Rad.
M	—	.188	—	4.78	

TO-204AA (TO-3)

Controlled Avalanche	Microsemi Standard	Fast Recovery	Peak Reverse Voltage
R702	R711	R711X	100V
R704	R712	R712X	200V
R706	R714	R714X	400V
	R716	R716X	600V

- Glass Passivated Die
- Hermetic Package
- VRRM 100V to 600V
- 250A Surge Rating
- Available as Common Anode, Common Cathode, or Doubler

Electrical Characteristics

Average forward current per leg	IF(AV) 15 Amps	TC = 100°C
Maximum surge current per leg	IFSM 250 Amps	8.3ms, half sine, TJ = 150°C
Maximum surge current per leg — fast recovery	IFSM 150 Amps	8.3ms, half sine, TJ = 150°C
Max I ² t for fusing	I ² t 260 A ² sec	
Max I ² t for fusing — fast recovery	I ² t 95 A ² sec	
Max peak forward voltage	VFM 1.2 Volts	IFM = 15A: TJ = 25°C*
Max peak forward voltage — fast recovery	VFM 1.4 Volts	IFM = 15A: TJ = 25°C*
Max peak reverse current	IRM 1.0 mA	VRRM, TJ = 25°C
Max peak reverse current — fast recovery	IRM 5.0 mA	VRRM, TJ = 150°C
Max recovery time — fast recovery	trr 200 ns	IF = 1A, IR = 2A, 25°C*

*Pulse test: Pulse width 300 μsec. Duty cycle 2%

Thermal and Mechanical Characteristics

Storage temperature range	TSTG	−65°C to 150°C
Operating junction temp range	TJ	−65°C to 150°C
Maximum thermal resistance	RθJC	1.5°C/W
Typical thermal resistance (greased)	RθCS	0.5°C/W case to sink
Weight		1.0 ounces (25.4 grams) typical

3-2-04 Rev. 0