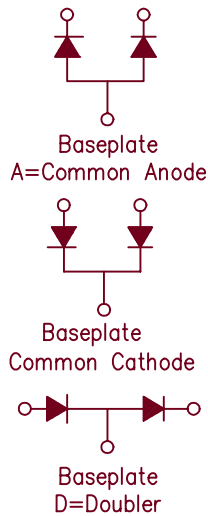
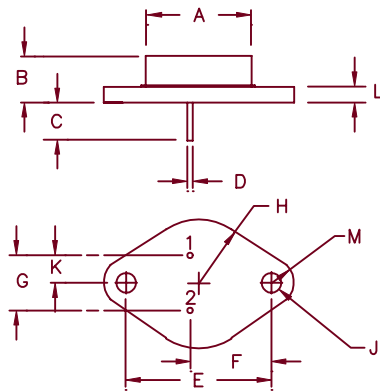


30 Amp Dual Power Rectifiers R702—R716X



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

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	$I_{F(AV)}$ 15 Amps	$T_C = 100^\circ\text{C}$
Maximum surge current per leg	I_{FSM} 250 Amps	8.3ms, half sine, $T_J = 150^\circ\text{C}$
Maximum surge current per leg – fast recovery	I_{FSM} 150 Amps	8.3ms, half sine, $T_J = 150^\circ\text{C}$
Max I^2t for fusing	I^2t 260 A^2sec	
Max I^2t for fusing – fast recovery	I^2t 95 A^2sec	
Max peak forward voltage	VFM 1.2 Volts	$I_{FM} = 15\text{A}; T_J = 25^\circ\text{C}^*$
Max peak forward voltage – fast recovery	VFM 1.4 Volts	$I_{FM} = 15\text{A}; T_J = 25^\circ\text{C}^*$
Max peak reverse current	I_{RM} 1.0 mA	VRRM, $T_J = 25^\circ\text{C}$
Max peak reverse current – fast recovery	I_{RM} 5.0 mA	VRRM, $T_J = 150^\circ\text{C}$
Max recovery time – fast recovery	t_{rr} 200 ns	$I_F = 1\text{A}, I_R = 2\text{A}, 25^\circ\text{C}^*$

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

Thermal and Mechanical Characteristics

Storage temperature range	T_{STG}	-65°C to 150°C
Operating junction temp range	T_J	-65°C to 150°C
Maximum thermal resistance	$R_{\theta JC}$	1.5°C/W
Typical thermal resistance (greased)	$R_{\theta CS}$	0.5°C/W case to sink
Weight		1.0 ounces (25.4 grams) typical

3-2-04 Rev. 0