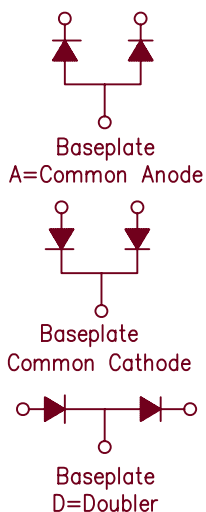
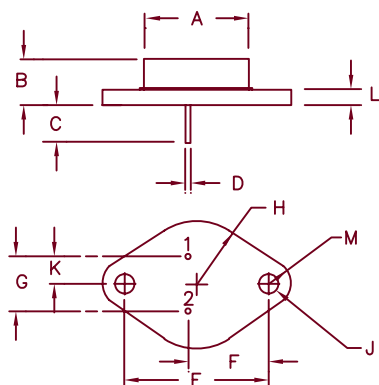


# 30 Amp Dual Power Rectifiers R702—R716X



Dim. Inches	Millimeter		Notes
	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	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 <sup>2</sup> t for fusing	I <sup>2</sup> t 260 A <sup>2</sup> sec	
Max I <sup>2</sup> t for fusing - fast recovery	I <sup>2</sup> t 95 A <sup>2</sup> 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  $\mu$ sec. 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	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



6 Lake Street  
Lawrence, MA 01841  
PH: (978) 620-2600  
FAX: (978) 689-0803  
www.microsemi.com

05-01-07 Rev. 1