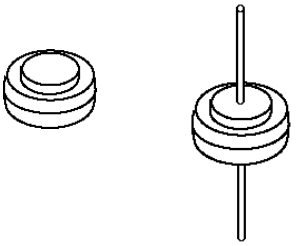
Semiconductor *Data Sheet*

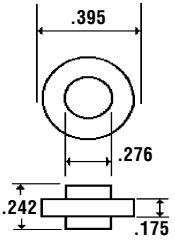
FASTORB - 70 Amp Avalanche AUTOMOTIVE RECTIFIERS

FR7028

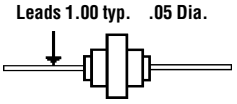
Description



Mechanical Dimensions



Options - Add Suffix to Part #:
FR7028L = 2 Leads
For 1 Lead Small Pkg:
FR7028C = Lead On Cathode
FR7028A = Lead On Anode



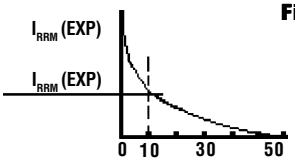
Features

- **INEXPENSIVE**
- **GLASS PASSIVATED DIE**
- **AVALANCHE VOLTAGE 24 TO 32 VOLTS**

Maximum Ratings	Symbol	FR7028 Value	Units
Peak Repetitive Reverse Voltage	V_{RRM}	20	Volts
Working Peak Reverse Voltage	V_{RWM}	20	Volts
DC Blocking Voltage	V_{DC}	20	Volts
Repetitive Peak Reverse Surge Current	I_{RSM}	200	Amps
Average Forward Rectified Current	I_O	70	Amps
Non-Repetitive Peak Forward Surge Current Surge Supplied @ Rated Load Conditions, ½ Wave, Single Phase	I_{FSM}	1000	Amps

	Length	Max.	Units
Thermal Resistance, Junction to Lead			
Both Equal Length Leads to Heat Sink $R_{\theta JL}$	¼"	7.5	°C / W
	⅜"	10	°C / W
	½"	13	°C / W
Thermal Resistance, Junction to Case $R_{\theta JC}$		.8 Typ	°C / W

Fig. 1



Surge Current Characteristics

Electrical Characteristics	Min.	Max.	Units
Instantaneous Forward Voltage (I_F = 100 Amps, T_C = 25°C)...V_F	N/A	1.0	Volts
Reverse Current (V_R = 20 V_{DC}, T_C = 25°C)...I_R	N/A	1.0	µAmps
Breakdown Voltage (I_R = 100 mAmps, T_C = 25°C)...V_{BR}	24	32	Volts
Clamping Voltage (I_R = 90 Amps, T_C = 150°C, PW = 80 µs)...V_{BR}	N/A	37	Volts
Typical Breakdown Voltage Temperature Coefficient...$V_{(br)}$ T_C	N/A	0.096	% / °C
Typical Forward Voltage Temperature Coefficient...(I_F = 10 mA) $V_{F(tc)}$	N/A	2	mV / °C