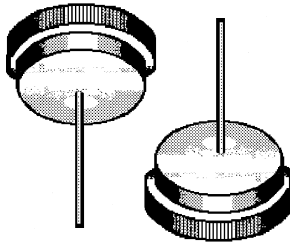


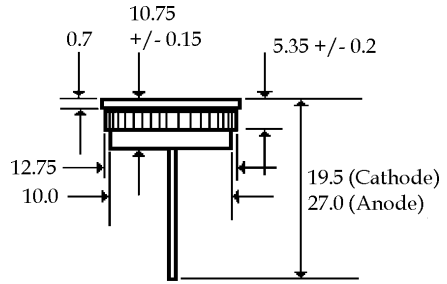
FASTORB - 35 Amp Press Fit Avalanche **AUTOMOTIVE** RECTIFIERS

PFR3523

Description



Mechanical Dimensions



(Dimensions in mm)

Features

- **INEXPENSIVE**
- **GLASS PASSIVATED DIE**

- **AVALANCHE VOLTAGE 19.8 TO 26.2 VOLTS**

PFR3523

Maximum Ratings	Symbol	Value	Units
Peak Repetitive Reverse Voltage	V_{RRM}	16	Volts
Working Peak Reverse Voltage	V_{RWM}	16	Volts
DC Blocking Voltage	V_{DC}	16	Volts
Repetitive Peak Reverse Surge Current Time Constant = 10 ms, Duty Cycle 1%, $T_C = 25^\circ\text{C}$ <i>(See Fig. 1)</i>	I_{RSM}	150	Amps
Average Forward Rectified Current Single Phase, Resistive Load, 60 Hz, $T_C = 150^\circ\text{C}$	I_O	35	Amps
Non-Repetitive Peak Forward Surge Current Surge Supplied @ Rated Load Conditions, 1/2 Wave, Single Phase	I_{FSM}	400	Amps
Operating & Storage Temperature Range	T_J, T_{STRG}	-40 to 200	$^\circ\text{C}$

	Length	Max.	Units
Thermal Resistance, Junction to Lead			
Both Equal Length Leads to Heat Sink	1/4"	7.5	$^\circ\text{C} / \text{W}$
$R_{\theta JL}$	3/8"	10	$^\circ\text{C} / \text{W}$
	1/2"	13	$^\circ\text{C} / \text{W}$
Thermal Resistance, Junction to Case		.8 Typ	$^\circ\text{C} / \text{W}$
$R_{\theta JC}$			

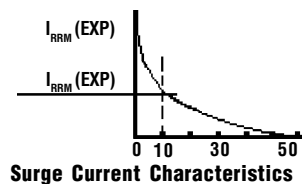


Fig. 1

Surge Current Characteristics

Electrical Characteristics	Min.	Max.	Units
Instantaneous Forward Voltage ($I_F = 100$ Amps, $PW = 30 \mu\text{s}$, $T_C = 25^\circ\text{C}$)... V_F	N/A	1.18	Volts
Instantaneous Reverse Current ($V_R = 16 V_{DC}$, $T_C = 25^\circ\text{C}$)... I_R	N/A	1.0	μAmps
Breakdown Voltage ($I_R = 100$ mAmps, $T_C = 25^\circ\text{C}$)... V_{BR}	19.8	26.2	Volts
Clamping Voltage ($I_R = 65$ Amps, $T_C = 150^\circ\text{C}$, $PW = 80 \mu\text{s}$)... V_{BR}	N/A	35	Volts
Typical Breakdown Voltage Temperature Coefficient... $V_{(br)}$ T_C	N/A	0.096	% / $^\circ\text{C}$
Typical Forward Voltage Temperature Coefficient...($I_F = 10$ mA) $V_{F(TC)}$	N/A	2	mV / $^\circ\text{C}$