Data Sheet

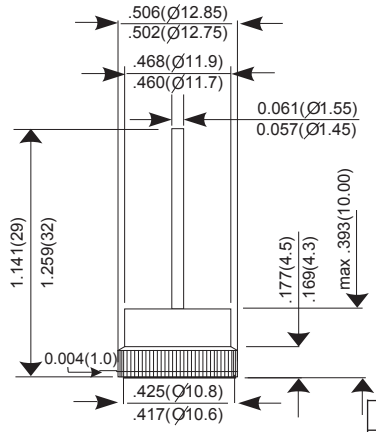
80 Amp Press Fit Avalanche AUTOMOTIVE RECTIFIERS

Features

- ✶ Low forward voltage drop
- ✶ High current capability
- ✶ High reliability
- ✶ High surge current capability

Mechanical Data

- ✶ Case: OFC Heat Sink
- ✶ Encapsulation: Epoxy Sealed Rated UL94V-0
- ✶ Polyimide Passivated Auto Rectifier
- ✶ P type Plastic Ring --Red color
- ✶ N type Plastic Ring --Green color
- ✶ Weight: 6.90 gram



Ring colcr	
80A(P)	Red
80A(N)	Green

Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating at 25°C ambient temperature unless otherwise specified.

Type Number	SYMBOL	PBFR8018JP/N	PBFR8020JP/N	PBFR8030JP/N	Units
Peak Repetitive Reverse Voltage@Irrm=100mA	V_{RRM}	19-25	24-28	34-40	V
Maximum RMS Voltage	V_{RMS}	16	20	28	V
Maximum DC Blocking Voltage(T_A=25°C) V_B	V_B	16	20	28	V
Average Forward Current Io@Tc=175°C 60 Hz, resistive or inductive load	$I_{(AV)}$	80			A
Peak Forward Surge Current, 8.3ms single Half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	800			A
Maximum Inst. Forward Voltage Drop, I_F at 100 Amp	V_F	0.96		0.98	V
Maximum DC Reverse Current @T_J=25°C At Rated DC Blocking Voltage @T_J=175°C	I_R	0.2 300			uA uA
Operating Junction and Storage Temperature Range T_J, T_{STG}	T_J, T_{STG}	- 40 to + 225			°C

RATINGS AND CHARACTERISTIC CURVES PBFR8018JP/N THRU PBFR8030JP/N

FIG.1 - FORWARD CURRENT DERATING CURVE

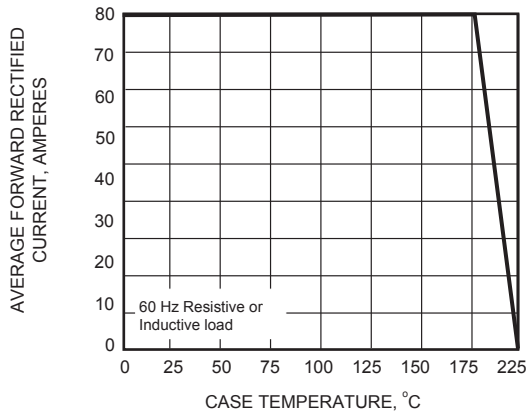


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

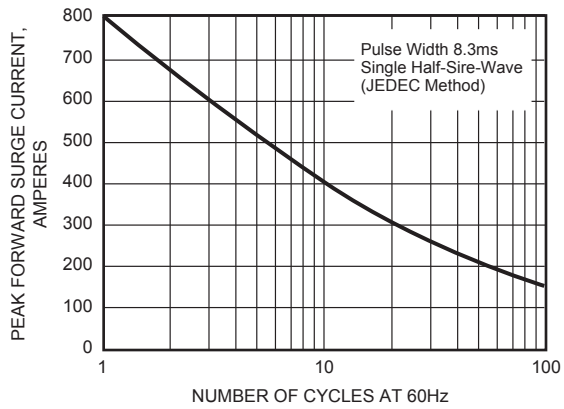


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

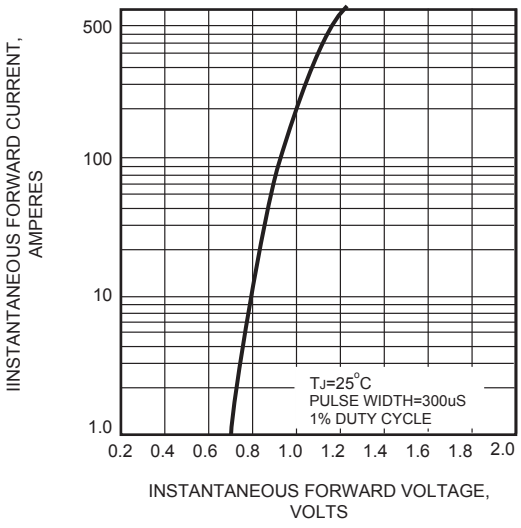


FIG.4 - TYPICAL REVERSE CHARACTERISTICS