



PRESS FIT AUTOMOTIVE RECTIFIER

LPB501 THRU LPB506
LPBS501 THRU LPBS506

VOLTAGE RANGE 100 to 600 Volts

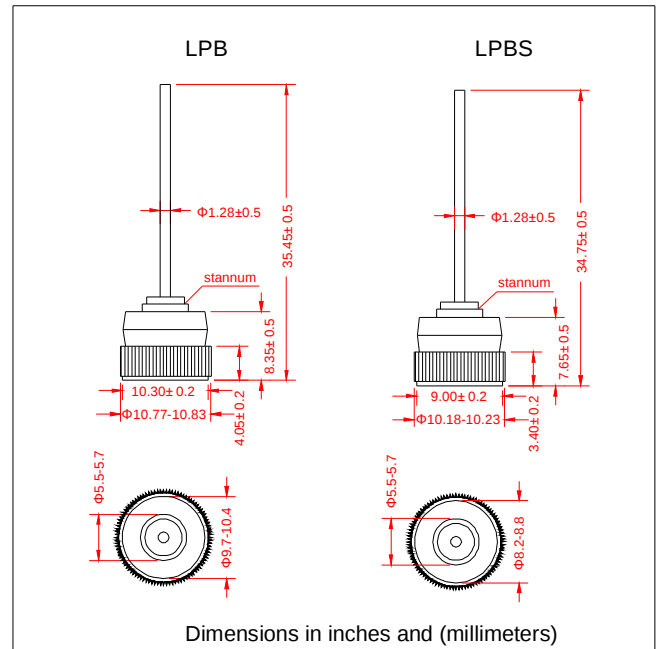
CURRENT 50.0 Amperes

TECHNICAL SPECIFICATION:**FEATURES**

- Low Leakage
- Low forward voltage drop
- High current capability
- High forward surge current capacity

MECHANICAL DATA

- Technology: Cell with Vacuum soldered
- Case: Copper case
- Polarity: As marked of case bottom
- Lead: Plated lead, solderable per MIL-STD-202E method 208C
- Mounting: Press Fit
- Weight: 0.17 ounces, 4.84 grams (LPB)
- Weight: 0.14 ounces, 3.96 grams (LPBS)

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

- Ratings at 25°C ambient temperature unless otherwise specified
- Single Phase, half wave, 60HZ, resistive or inductive load
- For capacitive load derate current by 20%

	SYMBOLS	LPB501 LPBS501	LPB502 LPBS502	LPB504 LPBS504	LPB506 LPBS506	UNIT
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	100	200	400	600	Volts
Maximum RMS Voltage	V _{RMS}	70	140	280	420	Volts
Maximum DC Blocking Voltage	V _{DC}	100	200	400	600	Volts
Maximum Average Forward Rectified Current, At Tc=105℃	I _(AV)	50				Amps
Peak Forward Surge Current 3.3mS single half sine wave superimposed on Rated load (JEDEC method)	I _{FSM}	600				Amps
Rating for fusing (t<8.3ms)	I ² t	1494				A ² S
Maximum instantaneous Forward Voltage at 100A	V _F	1.08				Volts
Maximum DC Reverse Current at Rated TA=25℃ DC Blocking Voltage TA=100℃	I _R	5.0				UA
		400				
Typical Thermal Resistance	R _{θJC}	0.8				℃/W
Operating and Storage Temperature Range	T _J ,T _{STG}	(-65 to +175)				℃
Polarity and voltage demotion color band (button)		Yellow	Silver	Orange	Green	

Notes:

1. Enough heatsink must be considered in application.



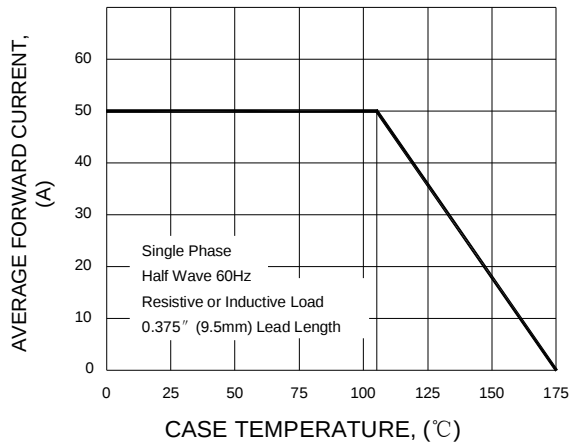
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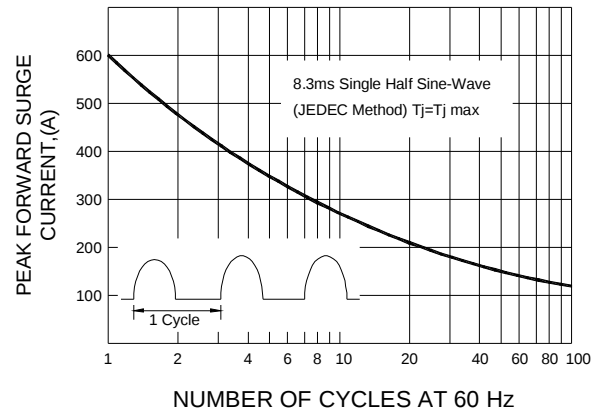
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RATINGS AND CHARACTERISTIC CURVES LPB501 THRU LPB506 LPBS501 THRU LPBS506

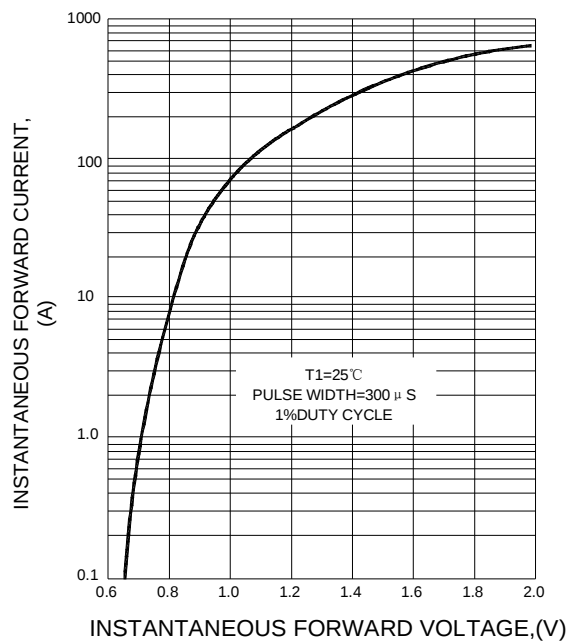
F1G.1 TYPICAL FORWARD CURRENT
DERATING CURVE



F1G.2 MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT



F1G.3 TYPICAL INSTANTANEOUS
FORWARD CHARACTERISTICS



F1G.4 FORWARD POWER DISSIPATION

