DIOTEC ELECTRONICS CORP
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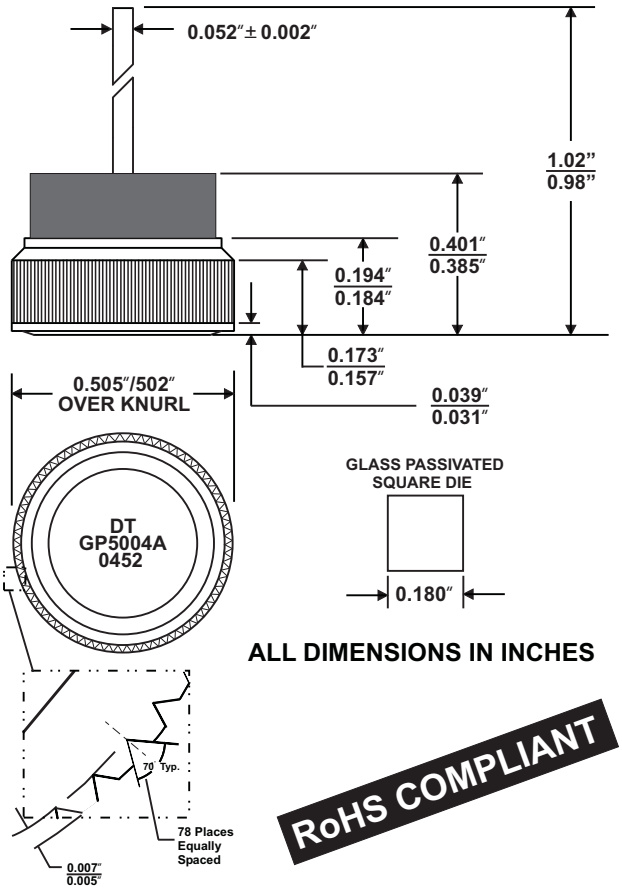
Data Sheet No. GP50PF-1A

50 AMP PRESS FIT HIGH VOLTAGE DIODES (GPP DIE)

FEATURES

- VOID FREE VACUUM DIE SOLDERING For Maximum Mechanical Strength And Heat Dissipation (Solder Voids: Typical ≤ 2%, Max. ≤ 5% of Die Area)
- Full Silicon Die Area on P- and N-Sides Are Soldered to Copper Slugs For Minimum Stress And Maximum Heat Dissipation
- Press Fit Into Heat Sink to Further Enhance Heat Handling Capability
- Very Low Resistivity Silicon Die For Lower Operating Junction Temperature
- Very Low Reverse Current Leakage For Minimum Energy Loss

MECHANICAL SPECIFICATION



ALL DIMENSIONS IN INCHES

RoHS COMPLIANT

MECHANICAL DATA

- Case: Nickel plated copper
- Finish: All external surfaces are corrosion resistant and the contact areas are readily weldable or solderable
- Maximum Soldering Temperature: 250 °C, 0.25" from case for 10 Seconds
- Mounting Position: Any. Maximum force used for diode insertion to be 12 KN
- Polarity: Color coded epoxy ring- ANODE on LEAD (Beige Ring): Part No.=GP5002PFA/GP5004PFA. CATHODE on LEAD (Black Ring) Part No.=GP5002PFC/GP5004PFC. Part No. marked on cap base.

MAXIMUM RATINGS & ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

PARAMETER (TEST CONDITIONS)	SYMBOL	RATINGS		UNITS
Series Number		GP5002PFA GP5002PFC	GP5004PFA GP5004PFC	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	200	400	VOLTS
Working Peak Reverse Voltage	V_{RWM}			
Maximum DC Blocking Voltage	V_{DC}			
Non-Repetitive Peak Reverse Voltage (Half Wave, 60 Hz, Single Phase)	V_{RSM}	240	480	
Average Forward Rectified Current	I_O	50	50	AMPS
Non-repetitive Peak Forward Surge Current (Half wave, single phase, 60 Hz sine applied to rated load)	I_{FSM}	600	600	
Forward VoltageDrop @ 50Amp DC (Typical) @ 100Amp DC (Typical)	V_F	<1.05 <1.20	<1.05 <1.20	VOLTS
Maximum DC Reverse Current at Rated Blocking Voltage Tc = 25 °C)	I_R	<1.0	<1.0	µA
Junction Operating & Storage Temperature Range	T_J, T_{STG}	-65 to +200	-65 to +200	°C