DIOTEC ELECTRONICS CORP
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Data Sheet No. TPFD-6024-1A

60 AMP 24 VOLT PRESS FIT TVS DIODES

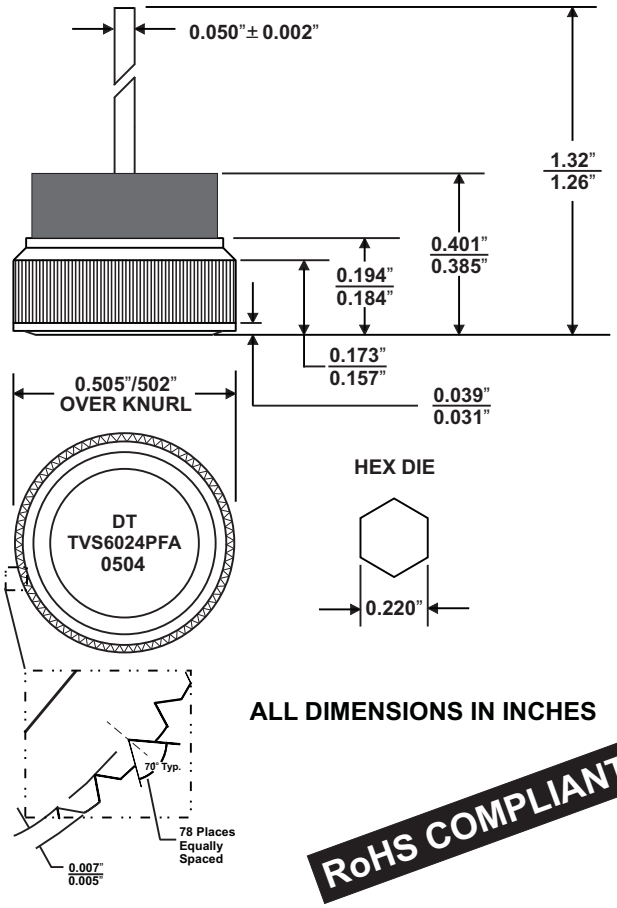
FEATURES

- VOID FREE VACUUM DIE SOLDERING FOR MAXIMUM MECHANICAL STRENGTH AND HEAT DISSIPATION (Solder Voids: Typical ≤ 2%, Max. ≤ 10% of Die Area)
- LARGE DIE FOR HIGH POWER HEAVY DUTY PERFORMANCE
- HIGH HEAT HANDLING CAPABILITY WITH VERY LOW THERMAL STRESS
- PROPRIETARY JUNCTION PASSIVATION FOR SUPERIOR RELIABILITY AND PERFORMANCE
- LOW FORWARD VOLATGE DROP

MECHANICAL DATA

- Case: Nickel plated copper
- Finish: All external surfaces are corrosion resistant and the contact areas are readily solderable
- Soldering Temperature: 210 °C maximum
- Mounting Position: Any. Maximum force used for diode insertion to be 12 KN
- Polarity: Color coded epoxy ring.
  ANODE on LEAD (Beige Ring):part number=TVS6024PFA.
  CATHODE on LEAD (Black Ring):Part No.=TVS6024PFC.
  Part No. marked on cap base.

MECHANICAL SPECIFICATION



ALL DIMENSIONS IN INCHES

RoHS COMPLIANT

MAXIMUM RATINGS & ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

PARAMETER (TEST CONDITIONS)	SYMBOL	RATINGS		UNITS
Series Number		TVS6024PFC	TVS6024PFA	
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	23	23	VOLTS
Working Peak Reverse Voltage	V_{RWM}			
Maximum DC Blocking Voltage	V_{DC}			
Breakdown Voltage (I_R = 100 mA dc, Tc = 25 °C)	$V_{(BR)}$	24 Min / 32 Max	24 Min / 32 Max	
Average Forward Rectified Current	I_O	60	60	AMPS
Non-repetitive Peak Forward Surge Current (Half wave, single phase, 60 Hz sine applied to rated load)	I_{FSM}	650	650	
Repetitive Peak Reverse Surge Current (Time Constant = 10 mSec Duty Cycle ≤ 1.0%, Tc = 25 °C)	I_{RSM}	140	140	
Instantaneous Forward Voltage (I_F = 100A@ 300 μSecpulse, Tc = 25°C) Maximum / Typical	V_F	1.05 / 1.00	1.05 / 1.00	VOLTS
Maximum DC Reverse Current (V_R = 20V DC, Tc = 25 °C)	I_R	200	200	nA
Maximum Thermal Resistance, Junction to Case	$R_{\theta JC}$	0.8	0.8	°C/W
Junction Operating & Storage Temperature Range	T_J,T_{STG}	-65 to +215	-65 to +215	°C

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