

## 75 AMP PRESS FIT TVS DIODES (PRELIMINARY)

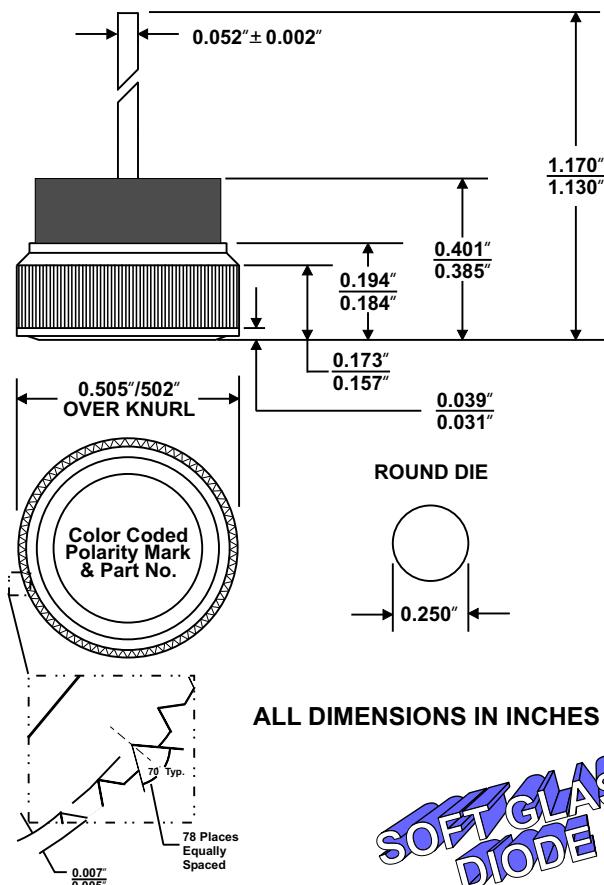
### FEATURES

- VOID FREE VACUUM DIE SOLDERING FOR MAXIMUM MECHANICAL STRENGTH AND HEAT DISSIPATION (Solder Voids: Typical  $\leq 2\%$ , Max.  $\leq 10\%$  of Die Area)
- LARGE DIE FOR HIGH POWER HEAVY DUTY PERFORMANCE
- HIGH HEAT HANDLING CAPABILITY WITH VERY LOW THERMAL STRESS
- Proprietary SOFT GLASS<sup>®</sup> junction passivation for superior reliability and performance
- Very low forward voltage drop
- Protects expensive automotive electronics and mobile equipment

### MECHANICAL DATA

- Case: Nickel plated copper
- Finish: All external surfaces are corrosion resistant and the contact areas are readily solderable
- Soldering Temperature: 250 °C maximum
- Mounting Position: Any. Maximum force used for diode insertion to be 12 KN
- Polarity: Color coded polarity mark and part number on cap base (ANODE on LEAD: Part No.=TVS7524PFA) (CATHODE on LEAD; Part No.=TVS7524PFC)

### MECHANICAL SPECIFICATION



ALL DIMENSIONS IN INCHES

SOFT GLASS<sup>®</sup>  
DIODE

### MAXIMUM RATINGS & ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

PARAMETER (TEST CONDITIONS)	SYMBOL	RATINGS		UNITS	
		TVS7524PFC	TVS7524PFA		
Series Number				VOLTS	
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	23	23		
Working Peak Reverse Voltage	V <sub>RWM</sub>				
Maximum DC Blocking Voltage	V <sub>DC</sub>				
Breakdown Voltage (I <sub>R</sub> = 100 mA dc, T <sub>c</sub> = 25 °C)	V <sub>(BR)</sub>	24 Min / 32 Max	24 Min / 32 Max	AMPS	
Average Forward Rectified Current	I <sub>o</sub>	75	75		
Non-repetitive Peak Forward Surge Current (Half wave, single phase, 60 Hz sine applied to rated load)	I <sub>FSM</sub>	800	800		
Repetitive Peak Reverse Surge Current (Time Constant = 10 mSec Duty Cycle $\leq 1.0\%$ , T <sub>c</sub> = 25 °C)	I <sub>RSR</sub>	150	150		
Instantaneous Forward Voltage (I <sub>F</sub> = 100A@ 300 μSecpulse, T <sub>c</sub> = 25°C)	V <sub>F</sub>	1.05 0.97	1.05 0.97	VOLTS	
Maximum DC Reverse Current (V <sub>R</sub> = 20V DC, T <sub>c</sub> = 25 °C)	I <sub>R</sub>	200	200	nA	
Maximum Thermal Resistance, Junction to Case	R <sub>θJC</sub>	0.75	0.75	°C/W	
Junction Operating & Storage Temperature Range	T <sub>J,TSTG</sub>	-65 to +175	-65 to +175	°C	

2.03 TVS7524PFC