



## TVS Auto Rectifier, 50A

### Features

- Low Leakage
- Low Forward Voltage Drop
- Low Cost
- High Surge Current Capability

### Mechanical Characteristics

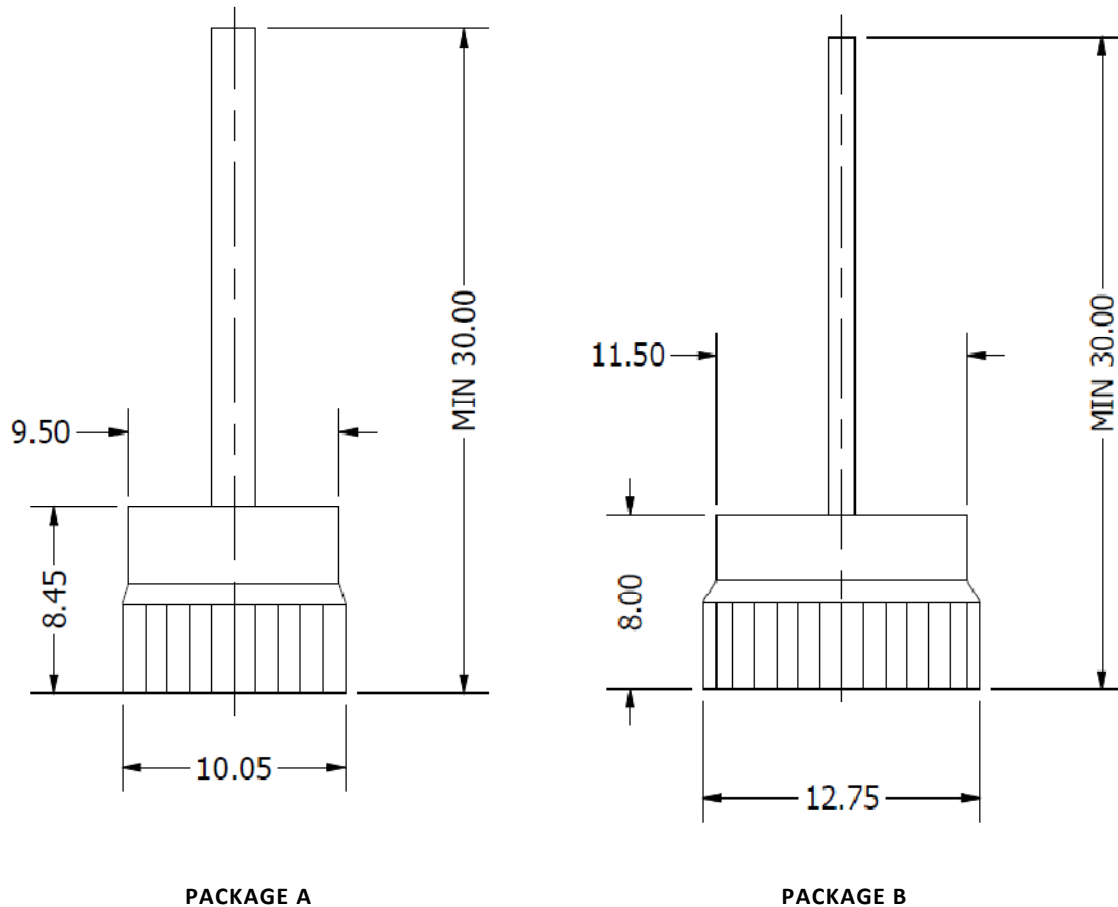
- **Encap:** Epoxy Sealed
- **Lead:** Plated Lead, Solderable
- **Mounting:** Press Fit
- **Weight:** 6.5 grams (approx.)



PRESS-FIT DIODE

Electrical Characteristics ( $T_A = 25^{\circ}\text{C}$ unless otherwise specified)					
Parameter	Symbol	NP5020(R)	NP5024(R)	NP5034(R)	Units
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	24	34	V
Maximum RMS Voltage	$V_{RMS}$	14	17	24	V
Maximum DC Blocking Voltage	$V_{DC}$	20	24	34	V
Maximum average forward output current @ $T_A = 50^{\circ}\text{C}$	$I_{F(AV)}$	50			A
Peak forward surge current (8.3ms) single half sine-wave superimposed on rated load	$I_{FSM}$	600			A
Maximum instantaneous forward voltage drop @ 100 A	$V_F$	1.2			V
Maximum DC reverse current at rated DC blocking voltage	$I_R$	$T_A = 25^{\circ}\text{C}$	1.0		$\mu\text{A}$
		$T_A = 100^{\circ}\text{C}$	150		
Typical Thermal Resistance	$R_{\theta(j-c)}$	0.8			$^{\circ}\text{C}/\text{W}$
Operating and storage temperature	$T_J, T_{STG}$	-40 to +175			$^{\circ}\text{C}$

### Package Outline



ALL DIMENSIONS IN MM

### Ordering Table

NP	50	20	R
1	2	3	4

- 1 – Press-fit Diode
- 2 – Current Rating =  $I_{F(AV)}$
- 3 – Voltage,  $V_{RRM}$  (as per table)
- 4 – Polarity:
  - > None = Normal (Cathode to Base) (**Red** Color Epoxy)
  - > R = Reverse (Anode to Base) (**Black** Color Epoxy)