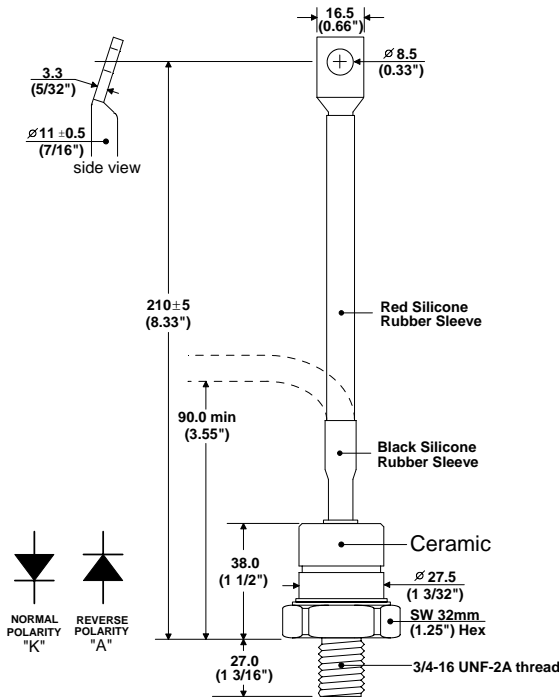


## DO-9 package



## Short Form Data Sheet

Part number scheme

**DO-9 K 41 N 12 KNX**  
1 2 3 4 5 6

- 1) Package designation
- 2) Polarity ("A" Anode thread, "K" Cathode tread)
- 3) Series number
- 4) Designates standard recovery time
- 5) Voltage Multiplier (example: 12 x 100 = 1200)
- 6) Proprietary suffix

### Features:

- ✓ All diffused silicone.
- ✓ Metal Ceramic package, conforms to JEDEC D0-9.
- ✓ Hermetic seal.
- ✓ Vibration resistant.

### Applications:

- Welding
- Plating
- Power Supplies

## Voltage

Parameter	Symbol	Rating	Units
Maximum Repetitive Reverse Voltage <small>Notes: 1, 3, 4, 5, 6</small>	$V_{RRM}$	1200 ~ 1800	Volts
Maximum non repetitive Surge of Reverse Voltage <small>Notes: 2, 3, 4, 5, 6</small>	$V_{RSM}$	$V_{RRM} + 100$	Volts
Maximum non repetitive Forward Voltage <small>Notes: 2</small>	$V_{FM} @ I_{FM}$	1.6 @ 1500	V @ A
<small>Note 1: <math>T_J</math> 25°C. Note 2: <math>T_J</math> 125°C. Note 3: Measured at the sine wave peak. Note 4: Below 0°C derate <math>V_{RRM}</math> 10%. Note 5: <math>V_{RRM}</math> has <math>I_{RRM}</math> of up to 30mA. Note 6: <math>V_{RR}</math> has typical <math>I_{DR}</math>, <math>I_{RR}</math> of 2~7mA. Note 7: For DC applications derate <math>V_{RRM}</math> 45%.</small>			
Specifying voltage:	1400V, DO-9K41N14 1200V, DO-9K41N12	1800V, DO-9K41N18 Above 1800V inquire for availability.	

## Amperage

Parameter	Symbol	Rating	Units
Maximum, Average Current <small>Notes: 3, 4</small>	$I_{F(AVE)}$	400	Amperes
Maximum, RMS Current <small>Notes: 3, 4</small>	$I_{F(RMS)}$	625	Amperes
Maximum non repetitive Surge Current with no reverse voltage reapplied. <small>Notes: 2, 4</small>	$I_{FSM} 0\% V_{RRM}$	6.9	kA
$I_{RR}$ = Typical Repetitive, Reverse, Current. <small>Note: 1</small>	$I_{RR}$	3 ~ 7	mA
$I_{RRM}$ = Maximum (threshold), Repetitive, Reverse, Current. <small>Note: 1</small>	$I_{RRM}$	30	mA
Fuse's absolute maximum $I^2 t$ with no reverse voltage reapplied <small>Note: 2, 4</small>	$I^2 t, 0\% V_{RR}$	22.5	kA
Reverse Recovery Charge ( $C_S$ = Stored Charge)	$Q_{RR}$	Consult factory	$\mu C_S$
<small>Note 1: <math>T_J</math> 25°C. Note 2: <math>T_J</math> 125°C. Note 3: <math>T_{CASE}</math> 55°C air cooled. Note 4: 180° conduction, 60Hz sine wave.</small>			

## Thermal, Mechanical & Weight

Parameter	Symbol	Rating	Units
Operating Temperature Range	$T_J$	-40° ~ 180°	°Celsius
Maximum Thermal resistance, Junction to Case <small>Notes: 1, 2</small>	$R_{th-J-C}$	0.11	°C/W
Maximum Thermal resistance, Case to Heat Sink <small>Notes: 1, 2, 3, 4, 5</small>	$R_{th-C-HS}$	0.1	°C/W
Mounting Torque (No Lubrication on Threads)		35	Nm
		310	lbf/in
Weight		198	Grams
		7	oz.
<small>Note 1: Recommended mounting torque applied Note 2: 180° conduction, 60Hz sine wave. Note 3: Case Temperature measured at hex section of base.</small>			