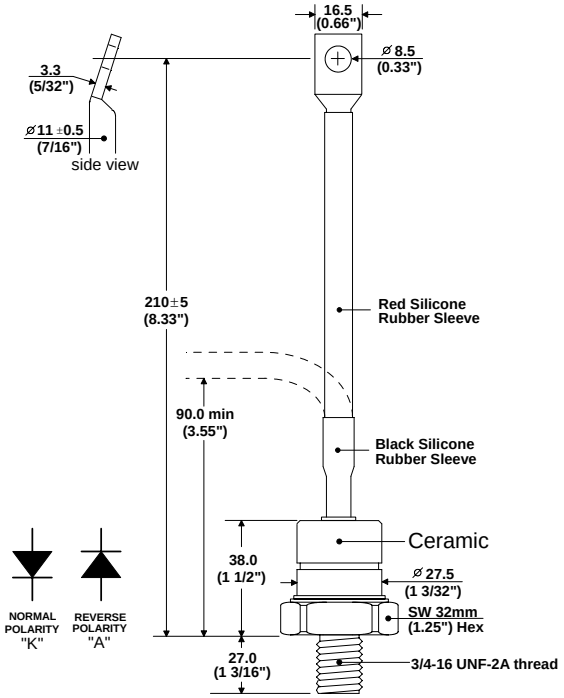
DO-9 package



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 Notes: 1, 3, 4, 5, 6	V_{RRM}	1200 ~ 1800	Volts
Maximum non repetitive Surge of Reverse Voltage Notes: 2, 3, 4, 5, 6	V_{RSM}	V_{RRM} + 100	Volts
Maximum non repetitive Forward Voltage Notes: 2	V_{FM} @ I_{FM}	1.6 @ 1500	V @ A
Note 1: T_J 25°C. Note 2: T_J 125°C. Note 3: Measured at the sine wave peak. Note 4: Below 0°C derate V_{RRM} 10%.			
Note 5: V_{RRM} has I_{RRM} of up to 30mA. Note 6: V_{RR} has typical I_{DR}, I_{RR} of 2~7mA. Note 7: For DC applications derate V_{RRM} 45%.			
Specifying voltage: 1400V, DO-9K41N14 1800V, DO-9K41N18			
1200V, DO-9K41N12 1600V, DO-9K41N16 Above 1800V inquire for availability.			

Amperage

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

Thermal, Mechanical & Weight

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