

Short Form Data Sheet

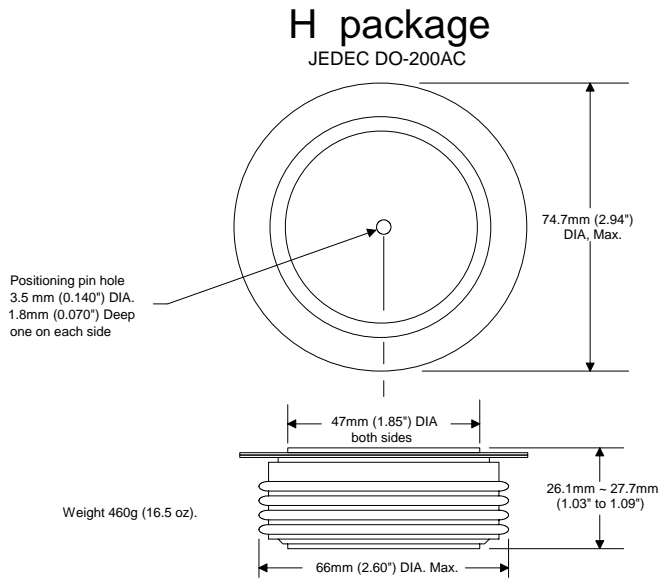
Part number scheme

H D 25 N 18 KNX
1 2 3 4 5 6

- 1) Package designation
- 2) Diode designation (i.e. Rectifier)
- 3) Series number
- 4) Designates standard recovery time
- 5) Voltage Multiplier (example: 18 x 100 = 1800)
- 6) Proprietary suffix

Features:

- ✓ All diffused silicone.
- ✓ Disk press package (nick named, Hockey Puck)
- ✓ Metal and ceramic package construction.
- ✓ Double side cooling.

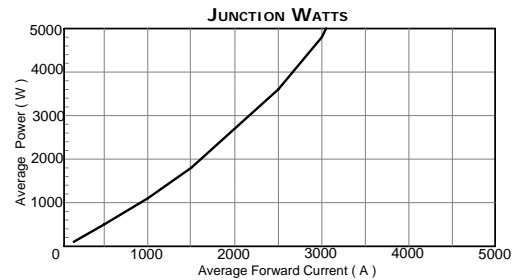
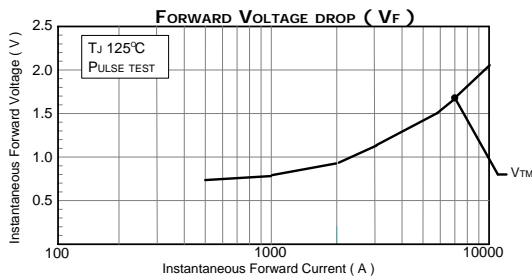


Voltage

| Parameter | Symbol | Rating | Units |
|--|----------------------------------|----------------------------------|---|
| Maximum Repetitive Reverse Voltage <small>Notes: 1, 3, 4, 5, 6</small> | V_{RRM} | 1600 ~ 2700 | Volts |
| Maximum non repetitive Surge of Reverse Voltage <small>Notes: 2, 3, 4, 5, 6</small> | V_{RSM} | $V_{RRM} + 100$ | Volts |
| <small>Note 1: T_J 25°C. Note 2: T_J 125°C. Note 3: Measured at the peak of the sine wave, Note 4: Below 0°C derate V_{DRM} and V_{RRM} 10%. Note 5: V_{DRM} and V_{RRM} have I_{DRM}, I_{RRM} of up to 50mA. Note 6: V_{DR} and V_{RR} have typical I_{DR}, I_{RR} of 2~7mA. Note 7: For DC applications derate V_{DRM} 45%.</small> | | | |
| Specifying voltage: | 1800V, HD25N18 1600V, HD25N16 | 2200V, HD25N22 2400V, HD25N24 | 2600V, HD25N26 Above 2600V inquire for availability. |

Current

| Parameter | Symbol | Rating | Units |
|--|------------------------|-----------------|-----------|
| Maximum, Average Current <small>Notes: 3, 4</small> | $I_{F(AVE)}$ | 2,400 | Amperes |
| Maximum, RMS Current <small>Notes: 3, 4</small> | $I_{F(RMS)}$ | 3,800 | Amperes |
| Maximum non repetitive Surge Current with no reverse voltage reapplied. <small>Notes: 2, 4</small> | I_{FSM} 0% V_{RRM} | 32 | 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} | 50 | mA |
| Fuse's absolute maximum $I^2 t$ with no reverse voltage reapplied <small>Note: 2, 4</small> | $I^2 t$, 0% V_{RR} | 4,300 | kA |
| Reverse Recovery Charge (C_s = Stored Charge) | Q_{RR} | Consult factory | μC_s |
| <small>Note 1: T_J 25°C. Note 2: T_J 125°C. Note 3: T_{Case} 55°C, double side air cooled. Note 4: 180° conduction, 60Hz sine wave.</small> | | | |



Thermal & Mechanical

| Parameter | Symbol | Rating | Units |
|--|---------------|-------------|----------|
| Operating Temperature Range | T_J | -40° ~ 180° | °Celsius |
| Maximum Thermal resistance, Junction to Case <small>Notes: 1, 3, 5</small> | R_{th-J-C} | 0.023 | °C/W |
| Maximum Thermal resistance, Case to Heat Sink <small>Notes: 1, 2, 3, 4, 5</small> | $R_{th-C-HS}$ | 0.01 | °C/W |
| Mounting Pressure | | 2300 ~ 2700 | kg |
| | | 5000 ~ 6000 | lb. |
| Weight | | 460 | Grams |
| | | 16.5 | oz. |
| <small>Note 1: Recommended mounting pressure applied Note 2: Mounting surfaces flat and greased Note 3: Double side cooled Note 4: Case Temperature measured at cathode flange Note 5: 180° on-state</small> | | | |