

FEATURES

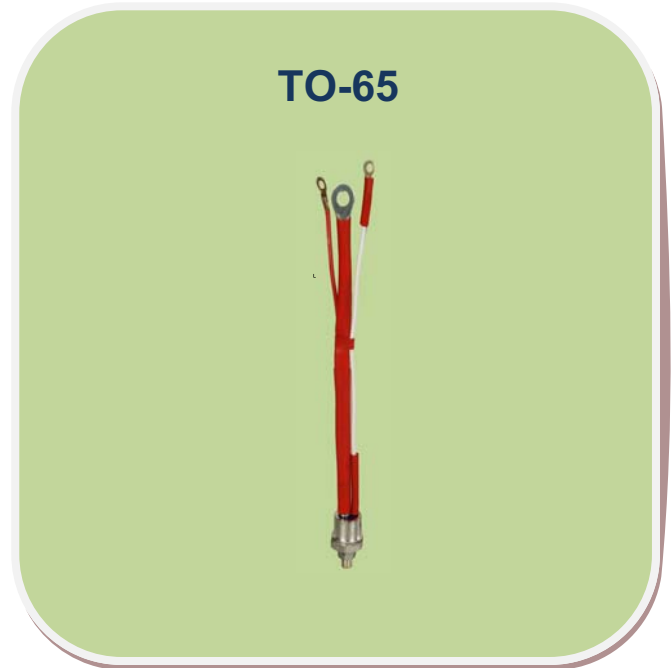
- Hermetic glass to metal seal
- High di/dt & dv/dt capabilities.
- Voltage grade upto 1600V

TYPICAL APPLICATIONS

- DC Motor control
- Controlled rectifiers
- AC Controllers

TECHNICAL DATA

| DEVICE TYPE | V_{DRM}/V_{RRM} (V) | V_{RSM} (V) |
|----------------|--------------------------|------------------|
| T40B120 | 1200 | 1300 |
| T40B160 | 1600 | 1700 |



| SYMBOL | CONDITIONS | VALUES |
|-------------------|---|----------------------------------|
| I_{TAV} | Sin. 180; $T_{case} = 94\text{ }^{\circ}\text{C}$ | 40 amp. |
| I_{RMS} | $T_a = 45\text{ }^{\circ}\text{C}$ | 65 amp. |
| I_{TSM} | $T_{vj} = 25\text{ }^{\circ}\text{C}$; 10ms | 1050 amp. |
| I^2t | $T_{vj} = 25\text{ }^{\circ}\text{C}$ | 8060 A^2S |
| I_{RRM}/I_{DRM} | $T_{vj} = 25\text{ }^{\circ}\text{C}$ $T_{vj} = 125\text{ }^{\circ}\text{C}$ | 3 mA 15 mA |
| V_T | $T_{vj} = 25\text{ }^{\circ}\text{C}$ ($I_T = 125\text{ Amp.}$); max | 1.65 V |
| di/dt | | 100A/us |
| dv/dt | | 500V/us |
| I_{GT} | $T_{vj} = 25\text{ }^{\circ}\text{C}$ | 250 mA |
| V_{GT} | $T_{vj} = 25\text{ }^{\circ}\text{C}$ | 3.5 V |
| I_H | $T_{vj} = 25\text{ }^{\circ}\text{C}$ Typical value | 200 mA |
| I_L | $T_{vj} = 25\text{ }^{\circ}\text{C}$ Typical value | 400 mA |
| $R_{th(j-c)}$ | Junction to case | 0.40 $^{\circ}\text{C}/\text{W}$ |
| $R_{th(c-h)}$ | case to heat sink | 0.25 $^{\circ}\text{C}/\text{W}$ |
| T_{vj} | | 125 $^{\circ}\text{C}$ |
| T_{stg} | | 125 $^{\circ}\text{C}$ |
| Mounting torque | | 4 Nm |
| Weight | Approx. | 30 gm |
| Package Outline | | B |

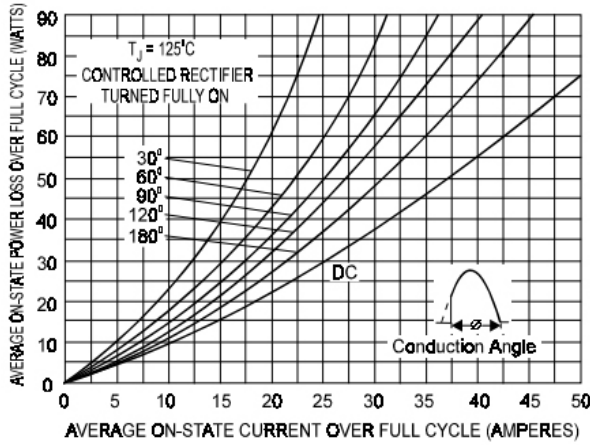
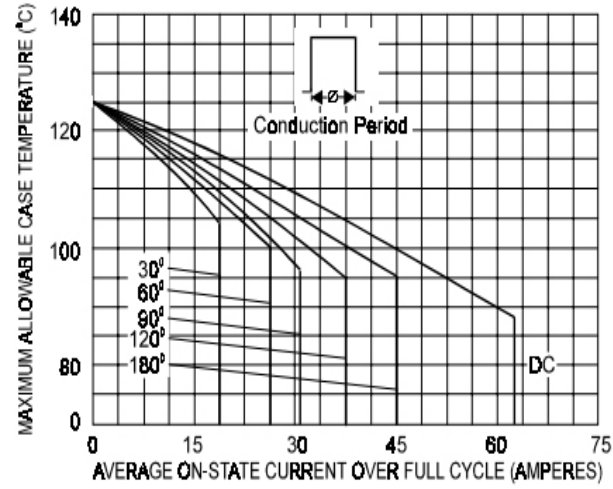
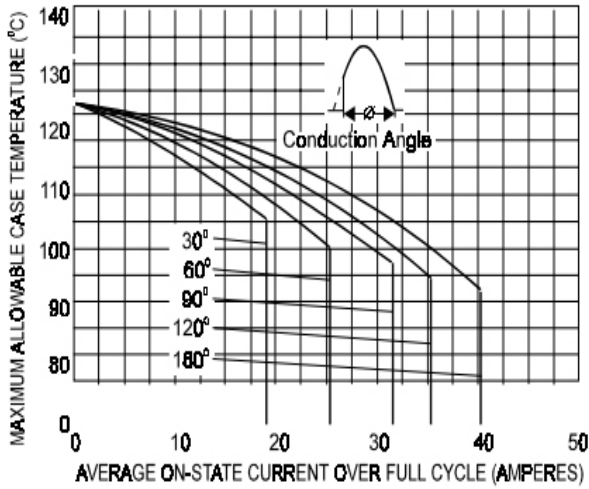


Fig. 5 - Maximum Low-Level On-state Power Loss Vs. Current (Sinusoidal Current Waveform)

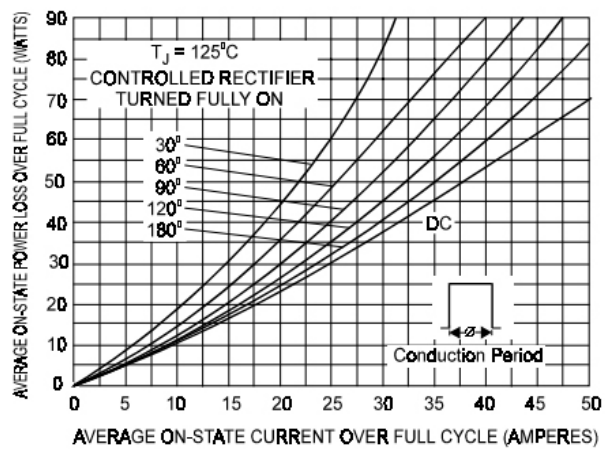


Fig. 6 - Maximum Low-Level On-state Power Loss Vs. Current (Rectangular Current Waveform)

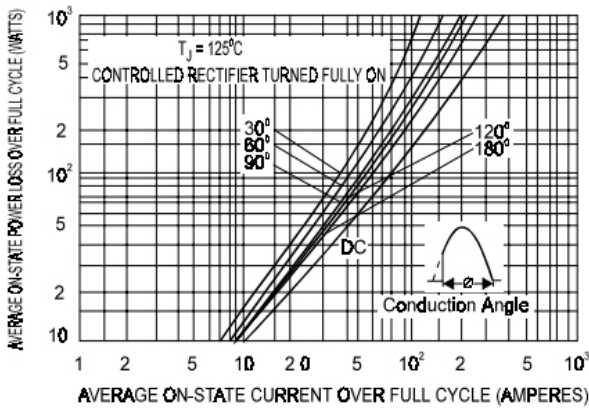


Fig. 9 - Maximum High-Level On-state Power Loss Vs. Current (Sinusoidal Current Waveform)

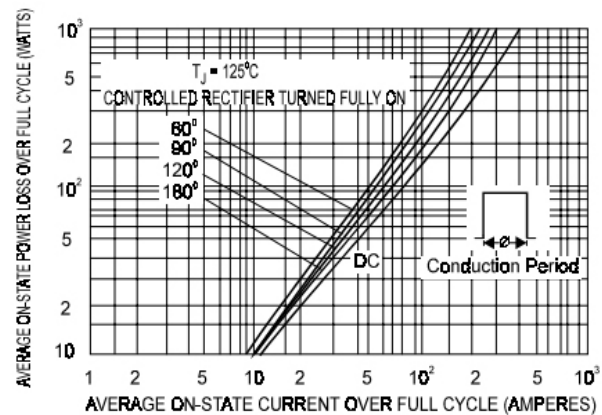


Fig. 10 - Maximum High-Level On-state Power Loss Vs. Current (Rectangular Current Waveform)

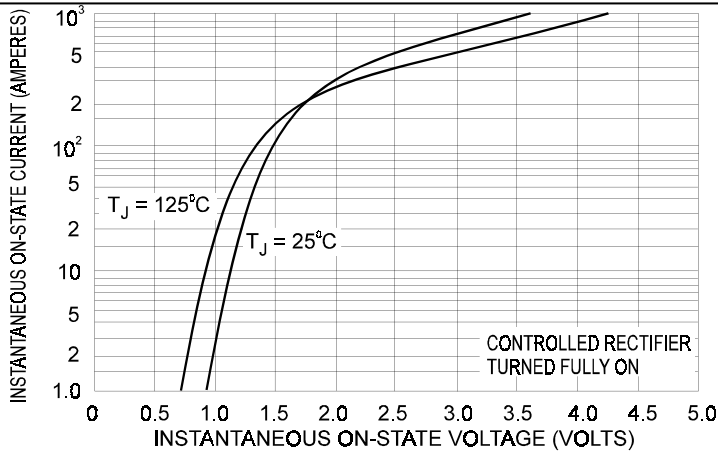


Fig. 13 - Maximum On-state Voltage Vs. Current

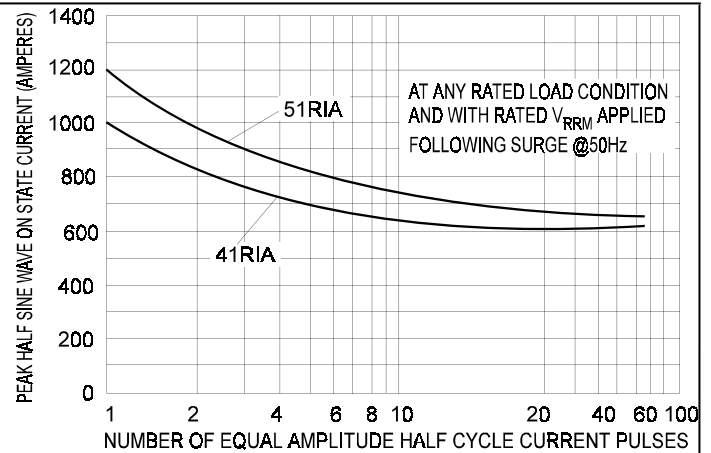


Fig. 14 - Maximum Non-Repetitive Surge Current Vs. Number of Current Pulses

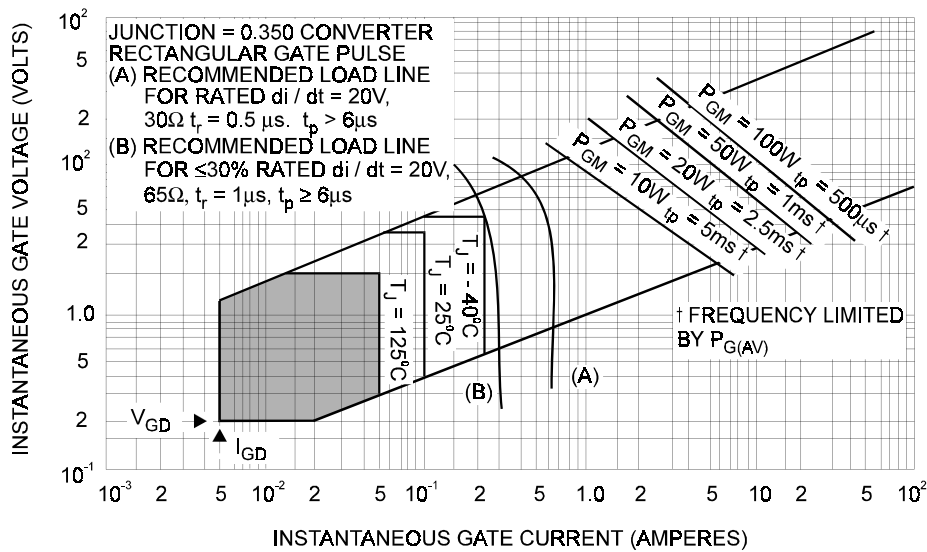


Fig. 15 - Gate Characteristics

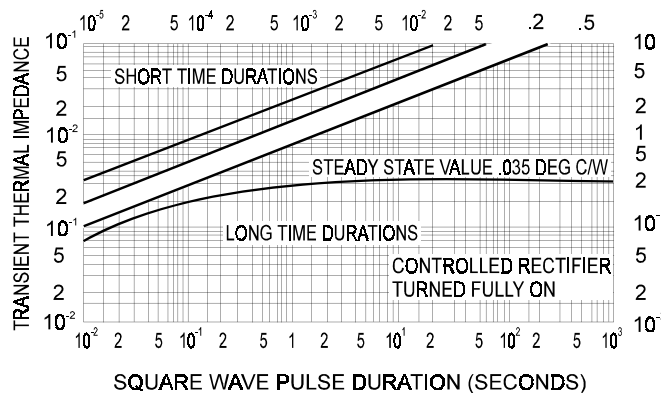
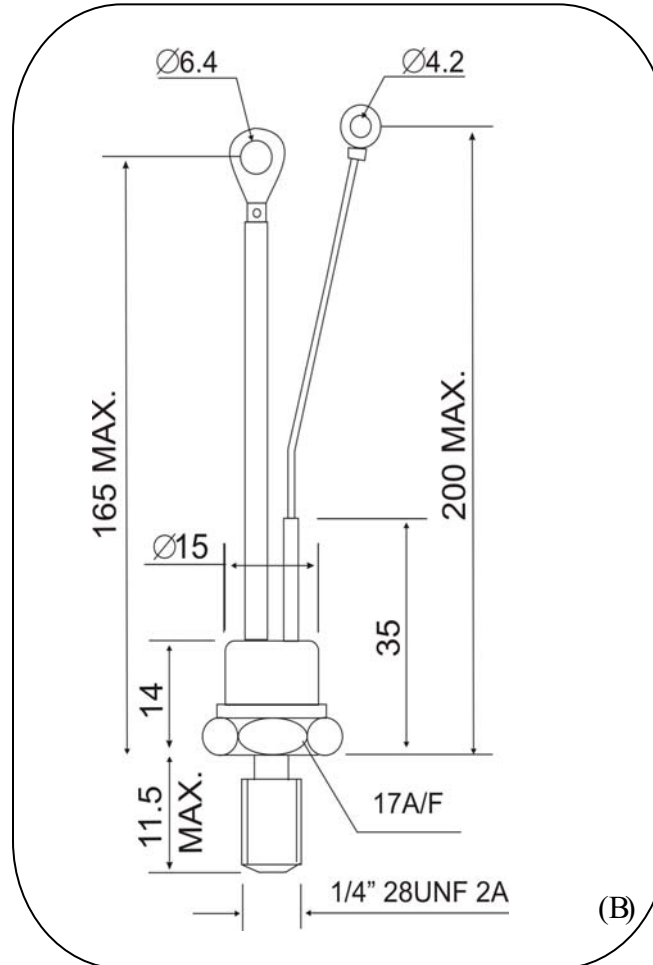


Fig. 16 - Maximum Transient Thermal Impedance, Junction To Case Vs Square Wave Pulse Duration

PACKAGE OUTLINE



All dimension are in mm .

Insel Rectifiers (India) Pvt. Ltd.

(An ISO 9001:2015, ISO 14001:2015 Certified Company)

Plot No 151, Udyog Kendra, Extn.-II, Ecotech-III, Greater Noida-201306

Toll Free No.: 1800 3070 9989, Fax : 011-27491404

E-mail : insel@rectifierindia.com, sales@rectifierindia.com