

Fast Recovery Diode BYP30-600

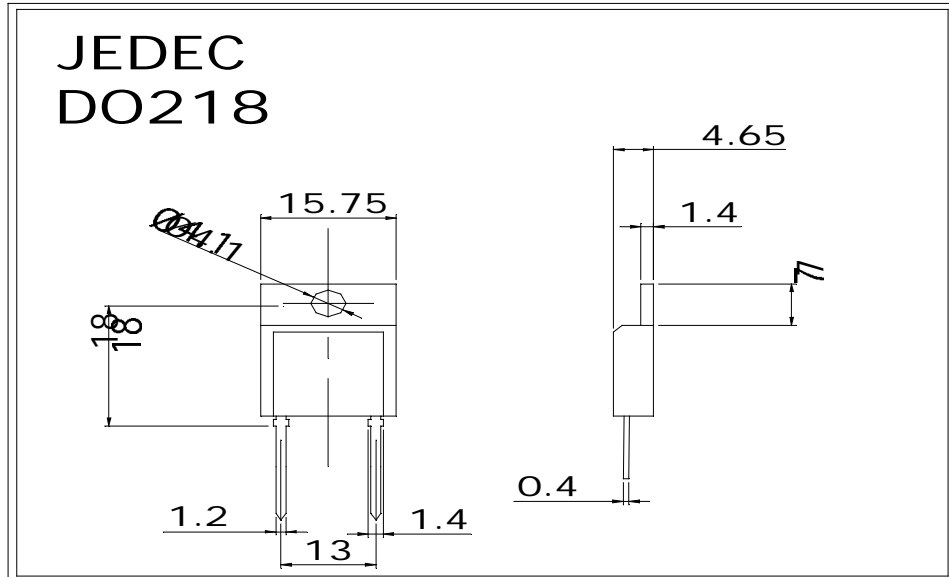
Technical Data

Typical Applications : Inverse diode for power transistors , Invertor , UPS , Snubber and clamping diode .

Features :

- ☞ Very short recovery times
- ☞ Soft recovery under all conditions

Case Outline :



Fast Recovery Diode BYP30-600

Maximum Ratings :

| Symbol | Parameters / Conditions | Ratings |
|-------------------------------------|---|---|
| Electrical Characteristics : | | |
| V_{RRM} | Peak Repetitive Reverse Voltage | 600 V |
| I_{RRM} | Leakage current ; $V_R = V_{RRM}$; $T_a = 25\text{ }^\circ\text{C}$ Leakage current ; $V_R = V_{RRM}$; $T_a = 125\text{ }^\circ\text{C}$ | < 0.10 mA < 4 mA |
| I_{FAV} | Maximum average forward rectified current ; sin. 180 ; $T_{case} = 85\text{ }^\circ\text{C}$ | 30 A |
| I_{FSM} | Peak forward surge current ; $T_{vj} = 25\text{ }^\circ\text{C}$; single half sine wave ; 10 ms $T_{vj} = 150\text{ }^\circ\text{C}$; single half sine wave ; 10 ms | 320 A 300 A |
| I^2t | Fusing limit ; $T_{vj} = 25\text{ }^\circ\text{C}$ | 510 A ² s |
| V_F | Forward voltage drop ; $T_{vj} = 25\text{ }^\circ\text{C}$; $I_F = 30\text{ A}$ | 2.35 V max |
| t_{rr} | Reverse recovery time | 120 ns |
| Thermal Characteristics : | | |
| R_{thjc} | Thermal resistance junction to case | 0.35 $^\circ\text{C/W}$ |
| R_{thch} | Thermal resistance case to heat sink | 0.25 $^\circ\text{C/W}$ |
| T_A | Operating Temperature | -40 $^\circ\text{C}$+ 150 $^\circ\text{C}$ |
| T_{Stg} | Storage Temperature | -40 $^\circ\text{C}$+ 150 $^\circ\text{C}$ |
| Outline : | | |
| Case Outline | Plastic Moulded Case | DO-218 |