

Normal Recovery Diode BY30-1000

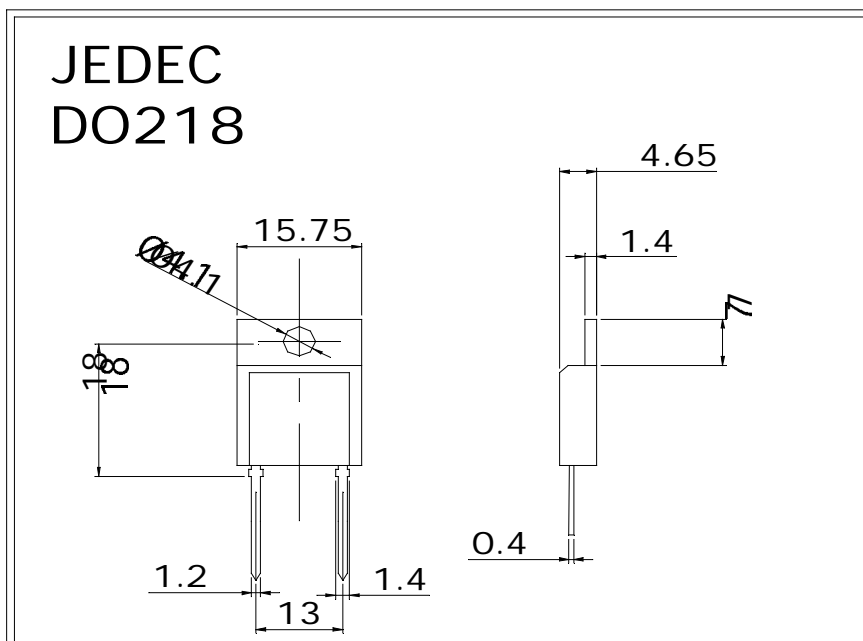
Technical Data

Typical Applications : All purpose mean power rectifier diodes , Free wheeling diode , Non controllable and half controllable rectifiers , UPS etc.

Features :

- ☞ Compact plastic package

Case Outline



Normal Recovery Diode BY30-1000

Maximum Ratings :

Symbol	Parameters / Conditions	Ratings
Electrical Characteristics :		
V_{RRM}	Peak Repetitive Reverse Voltage	1000 V
I_{RRM}	Leakage current ; $V_R = V_{RRM}$; $T_a = 25\text{ }^\circ\text{C}$ Leakage current ; $V_R = V_{RRM}$; $T_a = 125\text{ }^\circ\text{C}$	< 0.60 mA < 10 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	375 A 320 A
I^2t	Fusing limit ; $T_{vj} = 25\text{ }^\circ\text{C}$	700 A ² s
V_F	Forward voltage drop ; $T_{vj} = 25\text{ }^\circ\text{C}$; $I_F = 60\text{ A}$	1.55 V max
t_{rr}	Reverse recovery time	< 5 μs
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