

# Normal Recovery Diode BYV45-600

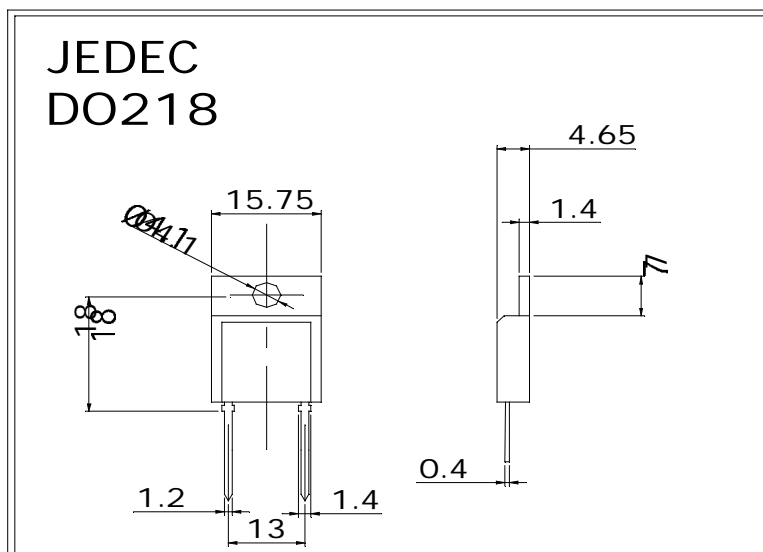
## Technical Data

**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 BYV45-600

## Maximum Ratings :

Symbol	Parameters / Conditions	Ratings
<b>Electrical Characteristics :</b>		
$V_{RRM}$	Peak Repetitive Reverse Voltage	600 V
$I_{RRM}$	Leakage current ; $V_R = V_{RRM}$ ; $T_a = 25\text{ }^\circ\text{C}$ Leakage current ; $V_R = V_{RRM}$ ; $T_a = 125\text{ }^\circ\text{C}$	< 0.60 mA < 10 mA
$I_{FAV}$	Maximum average forward rectified current ; sin. 180 ; $T_{case} = 85\text{ }^\circ\text{C}$	45 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	700 A 600 A
$I^2t$	Fusing limit ; $T_{vj} = 25\text{ }^\circ\text{C}$	2500 A <sup>2</sup> s
$V_F$	Forward voltage drop ; $T_{vj} = 25\text{ }^\circ\text{C}$ ; $I_F = 150\text{ A}$	1.6 V max
<b>Thermal Characteristics :</b>		
$R_{thjc}$	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 $^\circ\text{C}$
<b>Outline :</b>		
Case Outline	Plastic Moulded Case	DO-218