

## HTZ180D Series

$$I_{F(AV)} = 1.3 \text{ A}$$

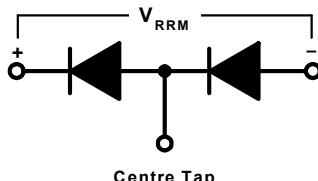
$$V_{RRM} = 35000 \text{ V}$$

## High Voltage Diode Rectifier Module

**LARONTROL**  
Electronic Devices

| Type Number | Repetitive Peak | Minimum Avalanche Voltage<br>$V_{(BR)R}$ |
|-------------|-----------------|------------------------------------------|
| HTZ180D35K  | 35000           | 37400                                    |
| HTZ180D30K  | 30000           | 33000                                    |
| HTZ180D26K  | 26000           | 28600                                    |
| HTZ180D22K  | 22000           | 24200                                    |

CIRCUIT DIAGRAM



Centre Tap



### CURRENT RATINGS - AIR COOLED

|               |                                        |                                                         |     |                      |
|---------------|----------------------------------------|---------------------------------------------------------|-----|----------------------|
| $I_{F(AV)}$   | Mean forward current                   | Half wave resistive load $T_{amb} = 35^{\circ}\text{C}$ | 1.3 | A                    |
| $I_F$         | Continuous (direct) forward current    | $T_{amb} = 35^{\circ}\text{C}$                          | 1.6 | A                    |
| $R_{th(j-a)}$ | Thermal resistance junction to ambient |                                                         | 4.7 | $^{\circ}\text{C/W}$ |

### CURRENT RATINGS - OIL COOLED

|               |                                     |                                                         |     |                      |
|---------------|-------------------------------------|---------------------------------------------------------|-----|----------------------|
| $I_{F(AV)}$   | Mean forward current                | Half wave resistive load $T_{oil} = 60^{\circ}\text{C}$ | 3.8 | A                    |
| $I_T$         | Continuous (direct) forward current | $T_{oil} = 60^{\circ}\text{C}$                          | 4.5 | A                    |
| $R_{th(j-o)}$ | Thermal resistance junction to oil  |                                                         | 1.1 | $^{\circ}\text{C/W}$ |

### SURGE RATINGS

|           |                                        |                                                |     |                        |
|-----------|----------------------------------------|------------------------------------------------|-----|------------------------|
| $I^2t$    | $I^2t$ for fusing                      | 10 ms half sine $T_{vj} = 150^{\circ}\text{C}$ | 50  | $\text{A}^2\text{sec}$ |
| $I_{FSM}$ | Surge (non-repetitive) forward current | $T_{vj} = 150^{\circ}\text{C}$                 | 100 | A                      |

### TEMPERATURE AND FREQUENCY RATINGS

|           |                              |                      |            |                    |
|-----------|------------------------------|----------------------|------------|--------------------|
| $T_{vj}$  | Virtual junction temperature | Forward (conducting) | 180        | $^{\circ}\text{C}$ |
|           |                              | Reverse (blocking)   | 180        | $^{\circ}\text{C}$ |
| $T_{stg}$ | Storage temperature range    |                      | -40 to 100 | $^{\circ}\text{C}$ |
| f         | Frequency range              |                      | 20 to 400  | Hz                 |

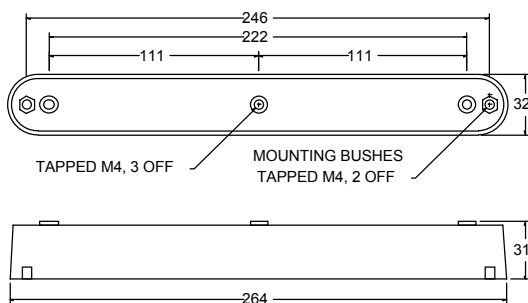
### CHARACTERISTICS $T_{case} = 25^{\circ}\text{C}$ unless otherwise stated

|          |                      |                                                 |          |    |
|----------|----------------------|-------------------------------------------------|----------|----|
| $V_{FM}$ | Forward voltage      | At 2 Amps peak                                  | max 22.0 | V  |
| $I_{RM}$ | Peak reverse current | At $V_{RRM}$ ; $T_{case} = 150^{\circ}\text{C}$ | max 0.5  | mA |

### Dimensioned Outlines

Dimensions shown are maximum in mm

Weight typ.: 0,50 Kg



IXYS reserves the right to change limits, test conditions and dimensions.

ZD

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