

FrelTec

Mathildenstr. 10A
82319 Starnberg
Germany

Fast Recover Rectifier DO41

DO-41

SPECIFICATION

| 683 | FR10_Gxxxx | DO41 | B0Y |
|-----------------------------------|------------|---------|--|
| Type | Type | Package | Packing |
| 683: Fast Recover Rectifier | FR10_G | DO41 | B0Y: tape in box (paper tape) for 2,5k pc |

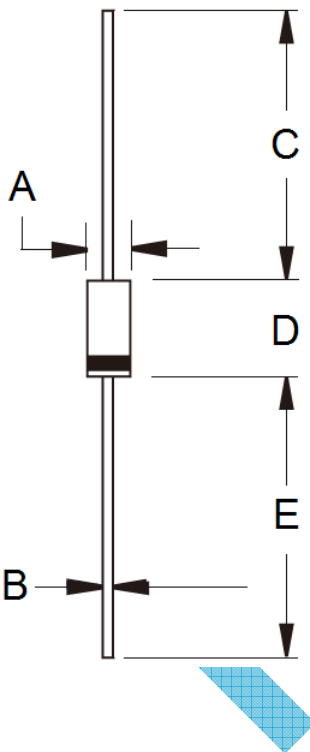
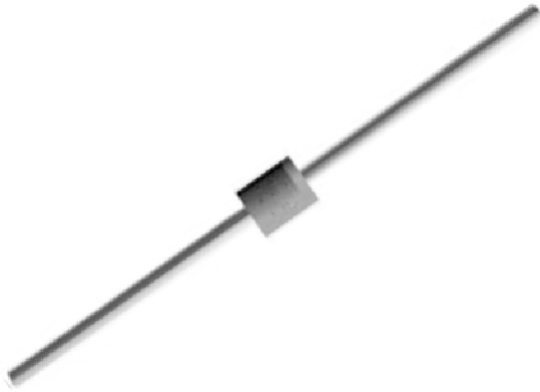
All products according to RoHS (2015/863/EU)

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Fast Recover Rectifier
FR10_G

PACKAGE OUTLINE



| DIM. | Unit (mm) | | Unit (inch) | |
|------|-----------|-----|-------------|-------|
| | Min | Max | Min | Max |
| A | 2,0 | 2,7 | 0,080 | 0,107 |
| B | 0,7 | 0,9 | 0,028 | 0,034 |
| C | 25,4 | - | 1 | - |
| D | 4,2 | 5,2 | 0,166 | 0,205 |
| E | 25,4 | - | 1 | - |

DO-41

Fast Recover Rectifier

Maximum Ratings & Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

| Parameter | Symbols | FR10 | FR10 | FR10 | FR10 | FR10 | FR10 | FR10 | Unit |
|---|---------------|--------------|------|------|------|------|------|------|------|
| | | 1G | 2G | 3G | 4G | 5G | 6G | 7G | |
| Maximum repetitive peak reverse voltage | VRRM | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS voltage | VRMS | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC blocking voltage | VDC | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum average forward rectified current | IF(AV) | 1,0 | | | | | | | A |
| Peak forward surge current 8,3 ms single half sine-wave | IFSM | 30 | | | | | | | A |
| Typical thermal resistance | R θ JA | 65 | | | | | | | °C/W |
| Operating junction and storage temperature range | Tj, TSTG | -55 --- +150 | | | | | | | °C |

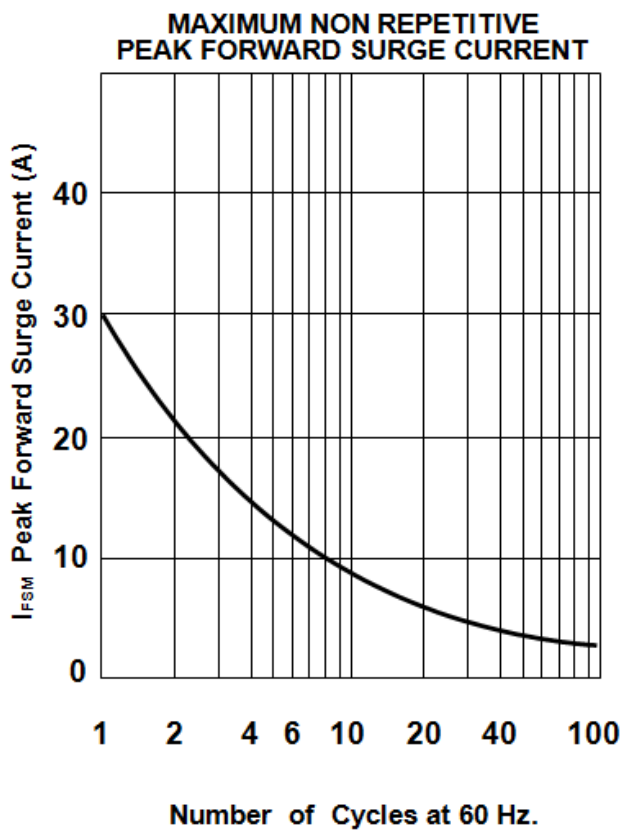
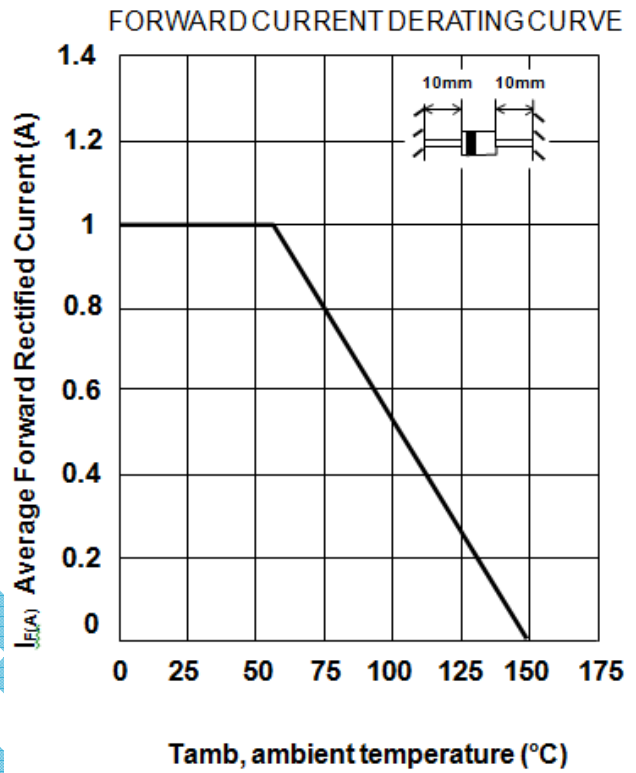
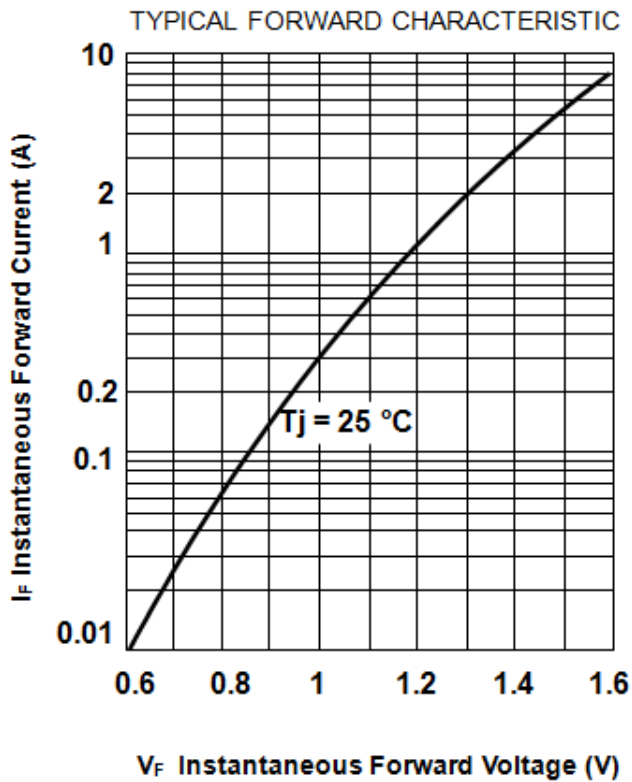
Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified

| Parameter | Symbols | FR10 | FR10 | FR10 | FR10 | FR10 | FR10 | FR10 | Unit |
|---|---------|------------|------|------|------|------|------|------|------|
| | | 1G | 2G | 3G | 4G | 5G | 6G | 7G | |
| IF = 1,0A Maximum forward voltage | VF | 1,3 | | | | | | | V |
| TA= 25°C Maximum reverse current TA=125°C | IR | 5,0 100 | | | | | | | μA |
| IF=0,5A IR=1,0A IRR=0,25A MAX. Reverse Recovery Time | trr | 150 | | | | | 300 | | nS |
| VR = 4,0V, f = 1MHz Type junction capacitance | Cj | 15 | | | | | | | pF |

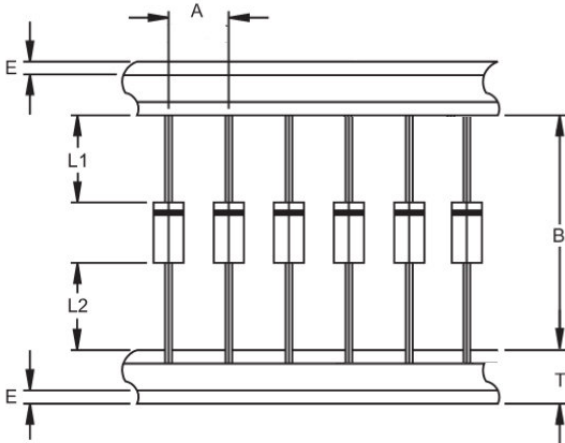
DO-41

Characteristics(Typical)



SPECIFICATION

Tape in box (paper tape)



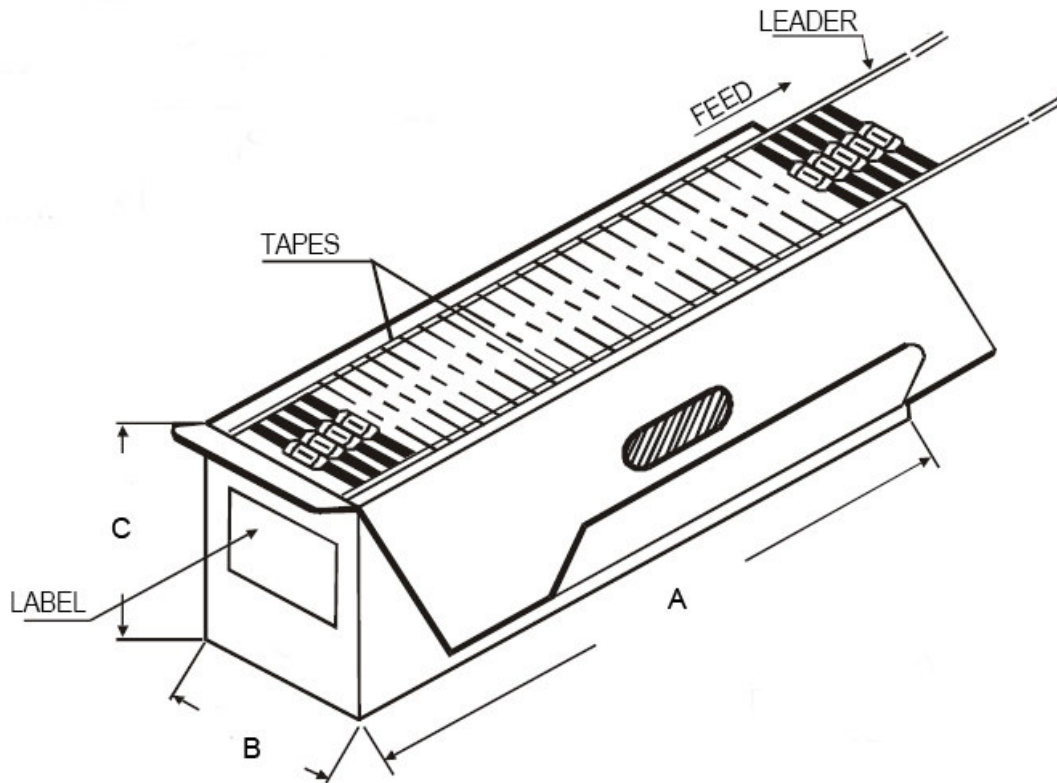
| Taping Dimensions | A +/- 0,5mm | B +/- 1,5mm | T | E | L1-L2 |
|-------------------|-------------------|-------------------|----------|--------|-------|
| DO-41 | 0,5mm | 52,4mm | 2,75~6,4 | 0,8max | ±1,2 |

DO-41

Fast Recover Rectifier

This axial-lead component's packaging requirements use in automatic testing and assembly equipment. And this standard practices for lead-tape packaging of axial-lead components meets the requirements of EIA Standard RS-296-D "Lead-taping of Components on Axial Lead Configuration for Automatic Insertion".

Tape & Ammo Outline

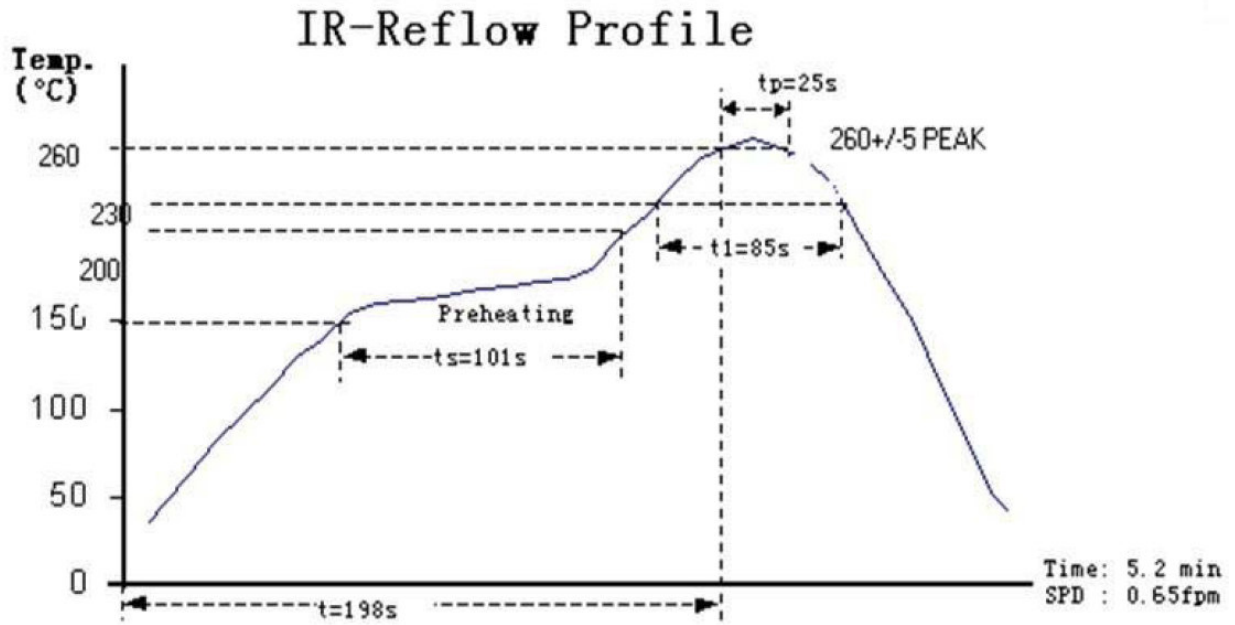


| Packaging | Available Product Outlines | Dimension "A" | Dimension "B" | Dimension "C" | Quantity Box |
|---------------------------|----------------------------|---------------|---------------|---------------|--------------|
| 52mm Horizontal Ammo Pack | DO-41 | 255mm | 73mm | 77mm | 2,5K |

Stock period

The performance of these products, including the solderability, is guaranteed for 12 month, provided that they remain packed as they were when delivered and stored at a temperature of 0-35°C and a relative humidity 35-75%RH

Lead Free Reflow Soldering Profile



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DO-41

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