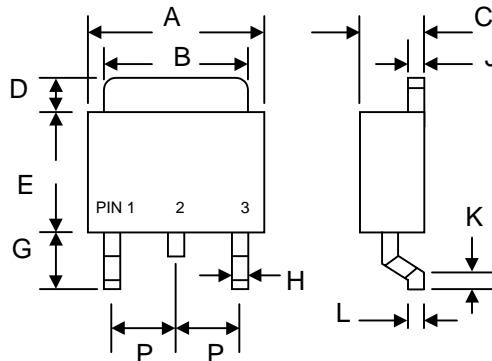


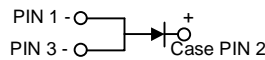
Features

- Glass Passivated Die Construction
- Ideally Suited for Automatic Assembly
- Low Profile Package
- High Surge Current Capability
- Low Power Loss, High Efficiency
- Super-Fast Recovery Time
- Plastic Case Material has UL Flammability Classification Rating 94V-O



Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band
- Weight: 0.4 grams (approx.)
- Mounting Position: Any
- Marking: Type Number
- Standard Packaging: 16mm Tape (EIA-481)



| D PAK/TO-252AA | | |
|----------------------|--------------|------|
| Dim | Min | Max |
| A | 6.4 | 6.8 |
| B | 5.0 | 5.4 |
| C | 2.35 | 2.75 |
| D | — | 1.60 |
| E | 5.3 | 5.7 |
| G | 2.3 | 2.7 |
| H | 0.4 | 0.8 |
| J | 0.4 | 0.6 |
| K | 0.3 | 0.7 |
| L | 0.50 Typical | |
| P | — | 2.3 |
| All Dimensions in mm | | |

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

| Characteristic | Symbol | ED302YS | ED303YS | ED304YS | ED306YS | Unit |
|---|-----------------------------------|-------------|---------|---------|---------|------|
| Peak Repetitive Reverse Voltage | V _{RRM} | | | | | |
| Working Peak Reverse Voltage | V _{RWM} | 200 | 300 | 400 | 600 | V |
| DC Blocking Voltage | V _R | | | | | |
| RMS Reverse Voltage | V _{R(RMS)} | 140 | 210 | 280 | 420 | V |
| Average Rectified Output Current @T _L = 75°C | I _O | 3.0 | | | | A |
| Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method) | I _{FSM} | 75 | | | | A |
| Forward Voltage (Note 1) @I _F = 3.0A | V _{FM} | 0.95 | 1.25 | | 1.7 | V |
| Peak Reverse Current @T _A = 25°C | I _{RM} | 5.0 | | | | μA |
| At Rated DC Blocking Voltage @T _A = 100°C | | 200 | | | | |
| Typical Thermal Resistance Junction to Ambient | R _{θJA} | 80 | | | | K/W |
| Reverse Recovery Time (Note 2) | t _{rr} | 35 | | | | nS |
| Operating and Storage Temperature Range | T _j , T _{STG} | -50 to +150 | | | | °C |

Note: 1. Mounted on P.C. Board with 14mm² (0.13mm thick) copper pad.
 2. Measured with I_F = 0.5A, I_R = 1.0A, I_{rr} = 0.25A.

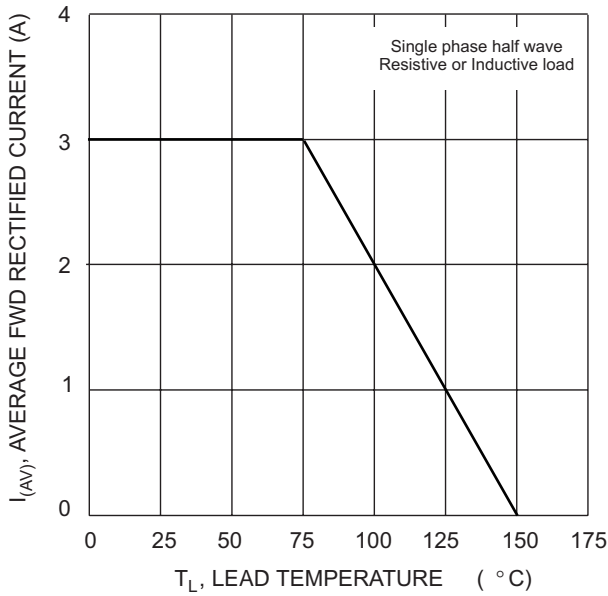


Fig. 1 Forward Current Derating Curve

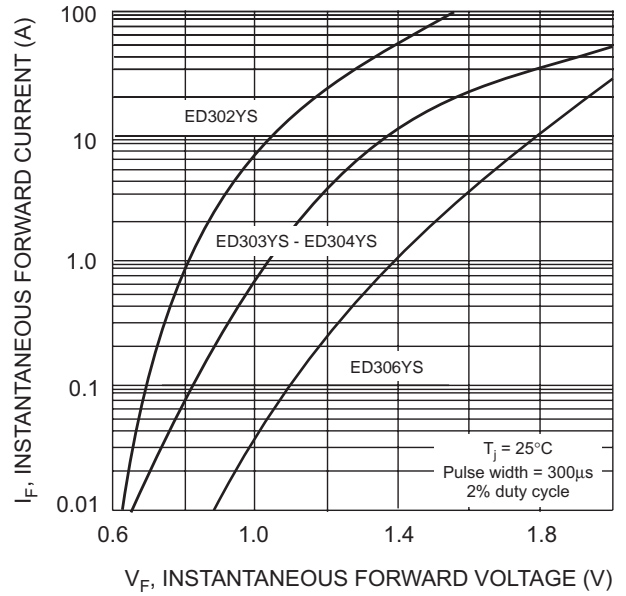


Fig. 2 Typical Forward Characteristics

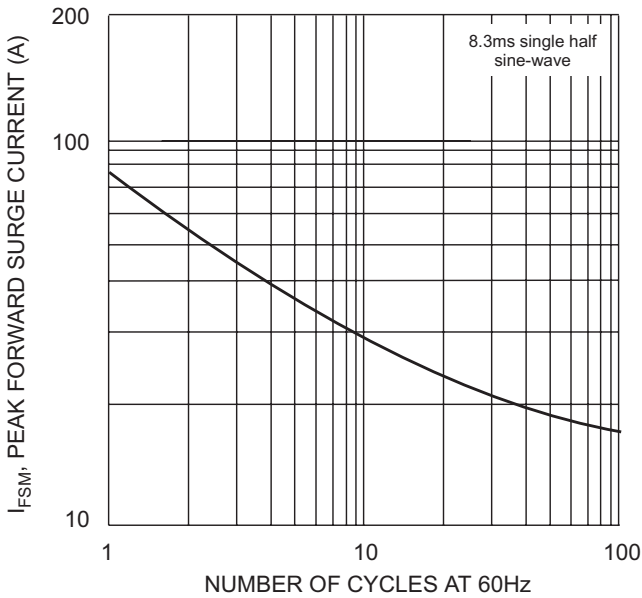


Fig. 3 Peak Forward Surge Current

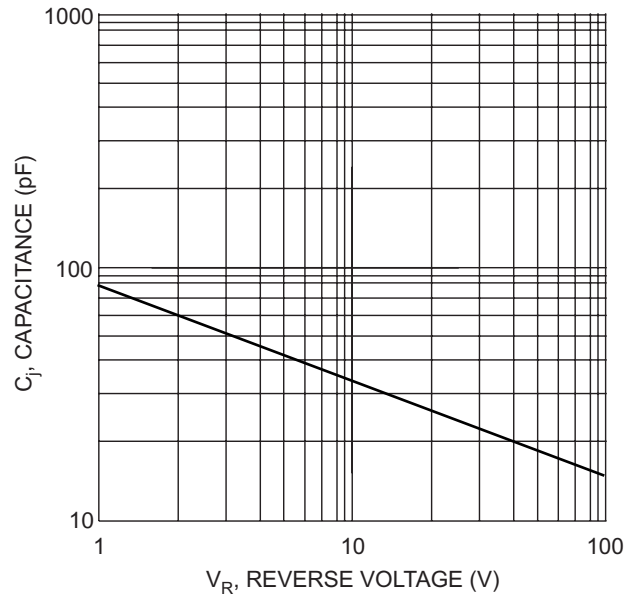
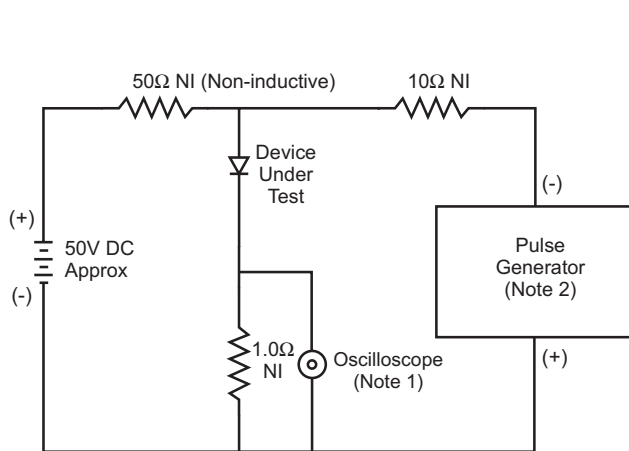


Fig. 4 Typical Junction Capacitance



- Notes:
1. Rise Time = 7.0ns max. Input Impedance = 1.0MΩ, 22pF.
 2. Rise Time = 10ns max. Input Impedance = 50Ω.

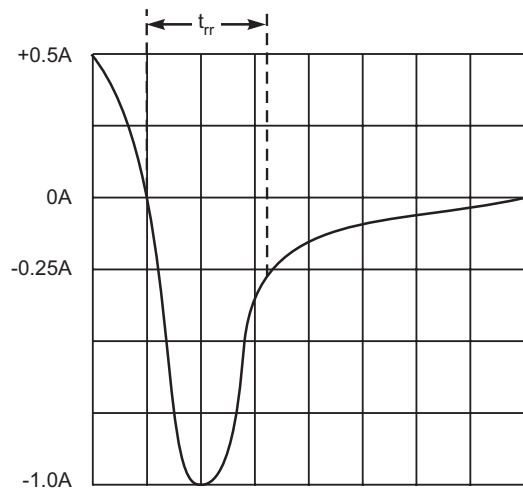


Fig. 5 Reverse Recovery Time Characteristic and Test Circuit

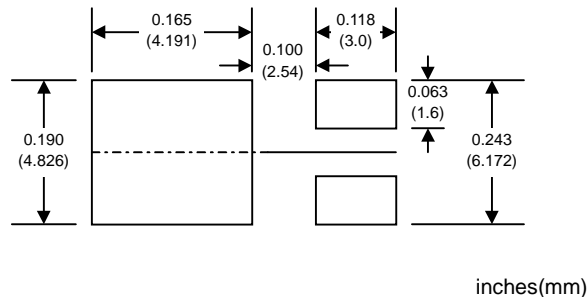
ORDERING INFORMATION

| Product No.♦ | Package Type | Shipping Quantity |
|--------------|--------------|-------------------|
| ED302YS-T3 | DPAK | 2500/Tape & Reel |
| ED303YS-T3 | DPAK | 2500/Tape & Reel |
| ED304YS-T3 | DPAK | 2500/Tape & Reel |
| ED306YS-T3 | DPAK | 2500/Tape & Reel |

♦T3 suffix refers to a 13" reel.

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

RECOMMENDED FOOTPRINT



inches(mm)

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Won-Top Electronics Co., Ltd.

No. 44 Yu Kang North 3rd Road, Chine Chen Dist., Kaohsiung, Taiwan

Phone: 886-7-822-5408 or 886-7-822-5410

Fax: 886-7-822-5417

Email: sales@wontop.com

Internet: <http://www.wontop.com>

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