

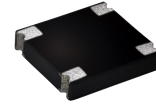
Z4GP206L-HF Thru. Z4GP210L-HF

Reverse Voltage: 600 to 1000 Volts

Forward Current: 2.0 A

RoHS Device

Halogen free

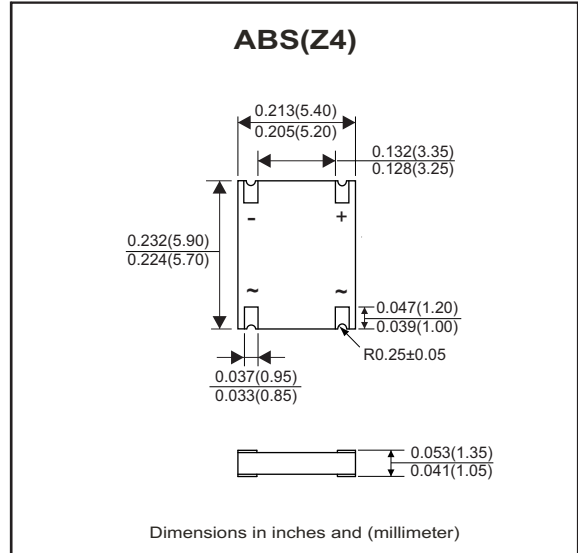


Features

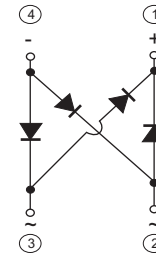
- Internal structure with GPRC (Glass passivated rectifier chip) inside.
- Lead less chip form, no lead damage.
- Low power loss, High efficiency.
- High current capability.
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0 .

Mechanical data

- Case: Packed with FRP substrate and epoxy underfilled.
- Terminals: Pure Tin plated (Lead-Free), solderable per MIL-STD-750, method 2026.
- Polarity: Laser marking symbols
- Weight: 0.11 gram



Circuit Diagram



Absolute Maximum Rating (at TA=25°C unless otherwise noted)

| Parameter | Symbol | Z4GP206L-HF | Z4GP208L-HF | Z4GP210L-HF | Unit |
|--|-------------------|-------------|-------------|-------------|------|
| Repetitive Peak Reverse Voltage | V _{RRM} | 600 | 800 | 1000 | V |
| Average Forward Current | I _(AV) | 2.0 | | | A |
| Peak Forward Surge Current, 8.3mS single half sine-wave, superimposed on rated load (JEDEC Method) | I _{FSM} | 60 | | | A |
| Operating Temperature Range | T _J | -55 to +175 | | | °C |
| Storage Temperature Range | T _{STG} | -55 to +175 | | | °C |

Electrical Characteristics (at TA=25°C unless otherwise noted)

| Parameter | Symbol | Conditions | Min. | Typ. | Max. | Unit |
|---------------------------------|---------------------|---|------|------|------|------------------|
| Forward Voltage | V _F | I _F = 2.0A | - | 0.92 | 0.95 | V |
| Repetitive peak reverse current | I _{RRM} | V _R =Max. V _{RRM} , Ta=25°C | - | 0.08 | 5 | uA |
| Current squared time | I ² t | t<8.3ms, Ta = 25°C | - | 14.9 | - | A ² S |
| Junction capacitance | C _J | V _R =4V, f=1.0MHz | - | 35 | - | pF |
| Thermal resistance | R _{th(JA)} | Junction to ambient (Note) | - | 80 | - | °C/W |
| | R _{th(JL)} | Junction to lead (Note) | - | 20 | - | °C/W |

Notes: 1. Mounted on P.C.B with 1.5*1.0mm copper pads..

Company reserves the right to improve product design , functions and reliability without notice.

REV:A

RATING AND CHARACTERISTIC CURVES (Z4GP206L-HF Thru. Z4GP210L-HF)

Fig.1- Forward Current Derating Curve

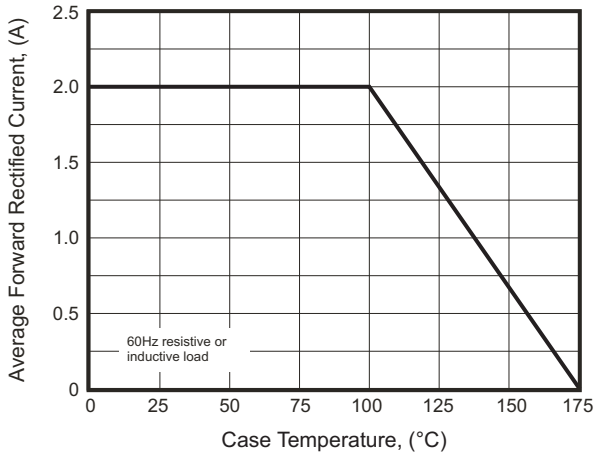


Fig.2- Maximum Non-Repetitive Peak Forward Surge Current

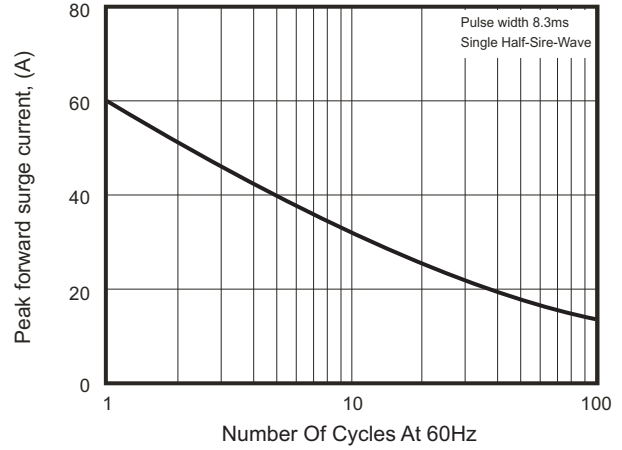


Fig.3- Typical Instantaneous Forward Characteristics

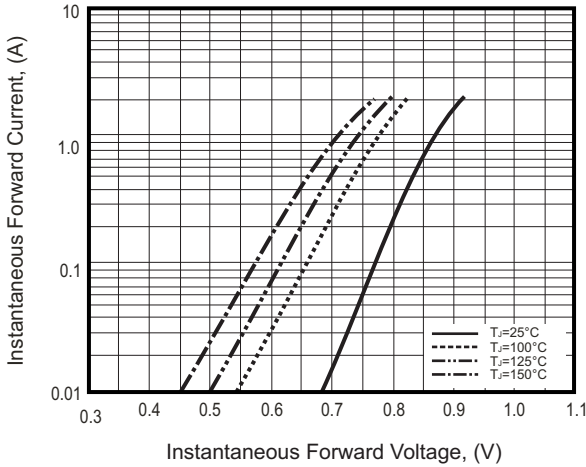


Fig.4- Typical Reverse Characteristics

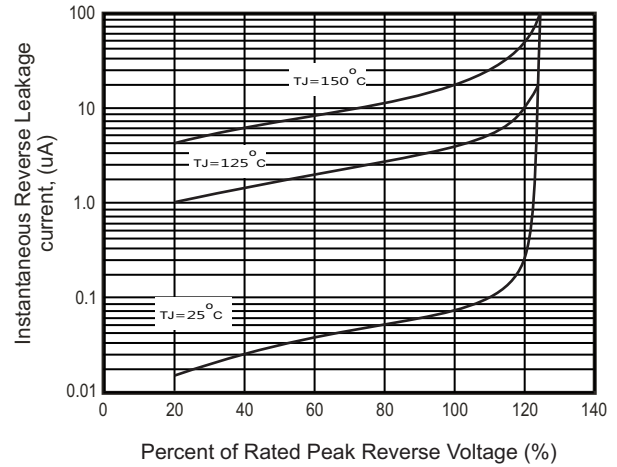
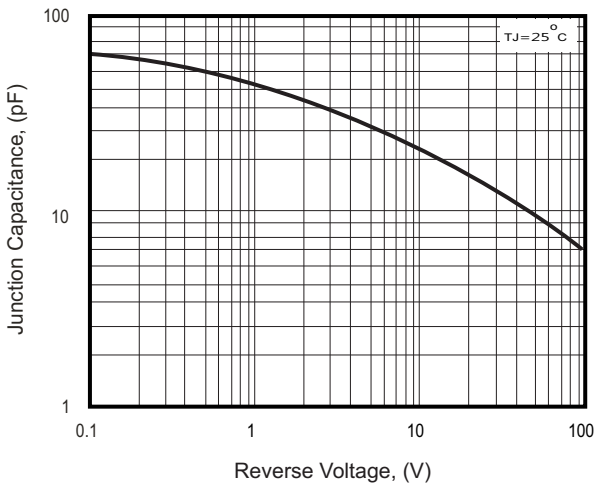


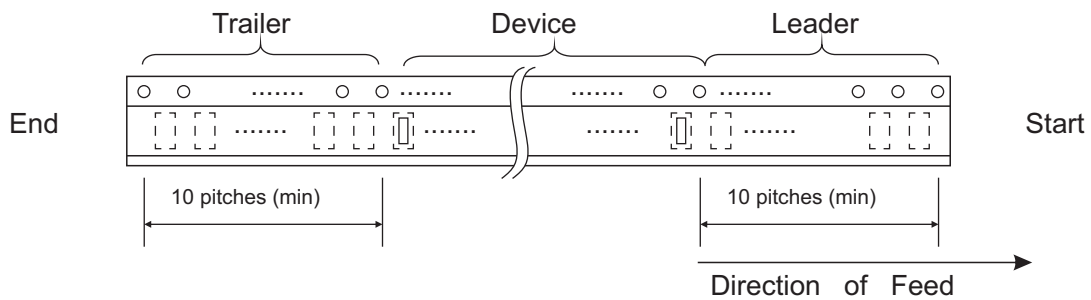
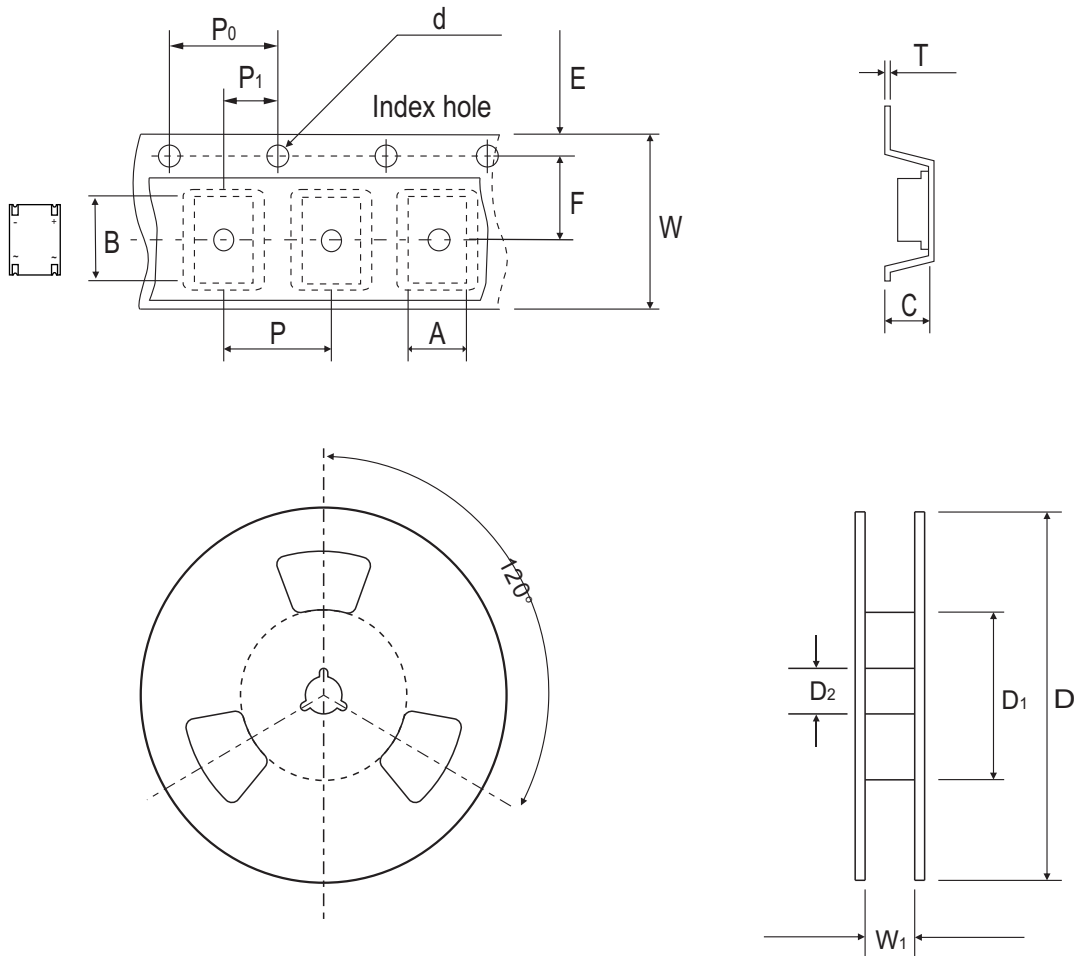
Fig.5 - Typical Junction Capacitance



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REV:A

Reel Taping Specification



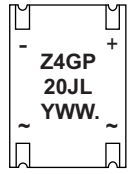
| ABS(Z4) | SYMBOL | A | B | C | d | D | D ₁ | D ₂ |
|---------|--------|---------------|---------------|---------------|---------------|----------------|----------------|----------------|
| | (mm) | 5.65 ± 0.10 | 6.15 ± 0.10 | 1.45 ± 0.10 | 1.50 ± 0.10 | 330 ± 2.00 | 50.0 MIN. | 13.0 ± 0.50 |
| | (inch) | 0.222 ± 0.004 | 0.242 ± 0.004 | 0.057 ± 0.004 | 0.059 ± 0.004 | 12.992 ± 0.079 | 1.969 MIN. | 0.512 ± 0.020 |

| ABS(Z4) | SYMBOL | E | F | P | P ₀ | P ₁ | W | W ₁ |
|---------|--------|---------------|---------------|---------------|----------------|----------------|---------------|----------------|
| | (mm) | 1.75 ± 0.10 | 5.50 ± 0.05 | 8.00 ± 0.10 | 4.00 ± 0.10 | 2.00 ± 0.10 | 12.00 ± 0.30 | 14.4 MAX. |
| | (inch) | 0.069 ± 0.004 | 0.217 ± 0.002 | 0.315 ± 0.004 | 0.157 ± 0.004 | 0.079 ± 0.004 | 0.472 ± 0.012 | 0.567 MAX. |

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Marking Code

| Part Number | Marking Code |
|-------------|--------------|
| Z4GP206L-HF | Z4GP20JL |
| Z4GP208L-HF | Z4GP20KL |
| Z4GP210L-HF | Z4GP20ML |

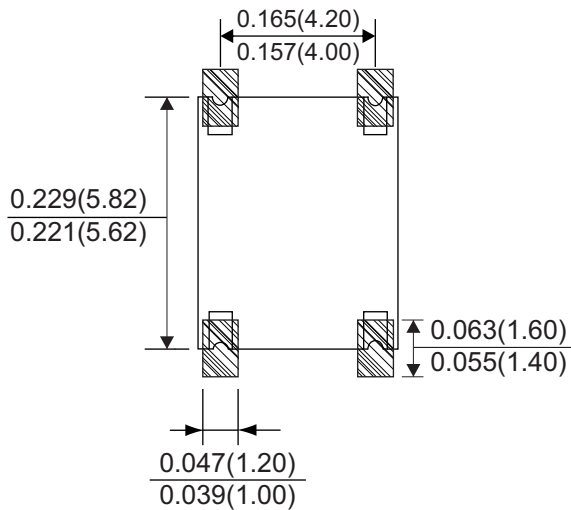


Z4GP = Series code
 20 = Amps class(2.0A)
 J = Voltage Class
 J = 600V
 K = 800V
 M = 1000V
 L = Low VF
 . = Halogen- free type

Y = Last digit of the year
 0 = 2010
 1 = 2011
 2 = 2012

WW = Mfg week
 01 = First week
 02 = Second week
 03 = Third week

Suggested PAD Layout



Standard Packaging

| Case Type | REEL PACK | |
|-----------|--------------|------------------|
| | REEL (pcs) | Reel Size (inch) |
| ABS(Z4) | 5,000 | 13 |