

SHINDENGEN

Super Fast Recovery Rectifiers

Single

S3L20U

200V 3A

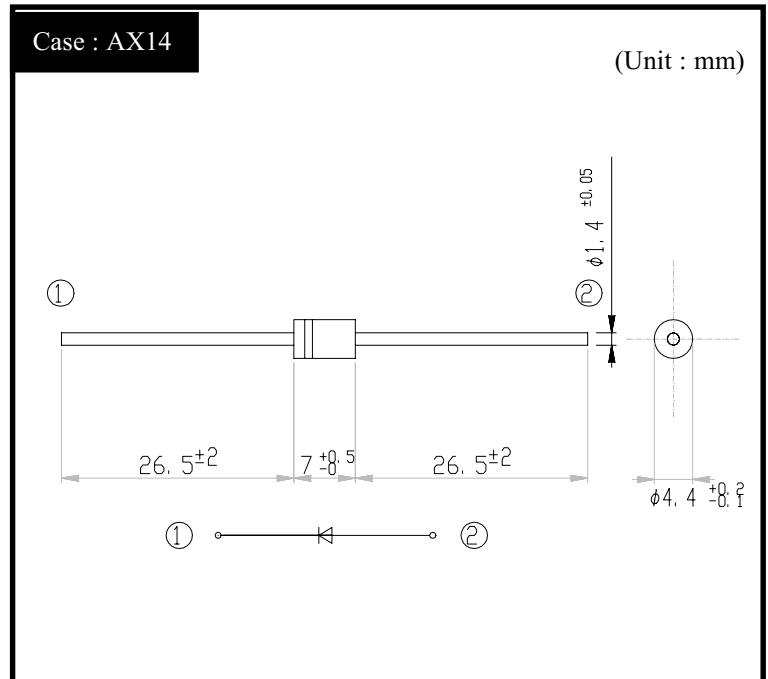
FEATURES

- Low noise
- trr35ns
- Applicable to Automatic Insertion

APPLICATION

- Switching power supply
- Free Wheel
- Home Appliances, Office Equipment
- Telecommunication, Factory Automation

OUTLINE DIMENSIONS



RATINGS

● Absolute Maximum Ratings (If not specified Tl=25°C)

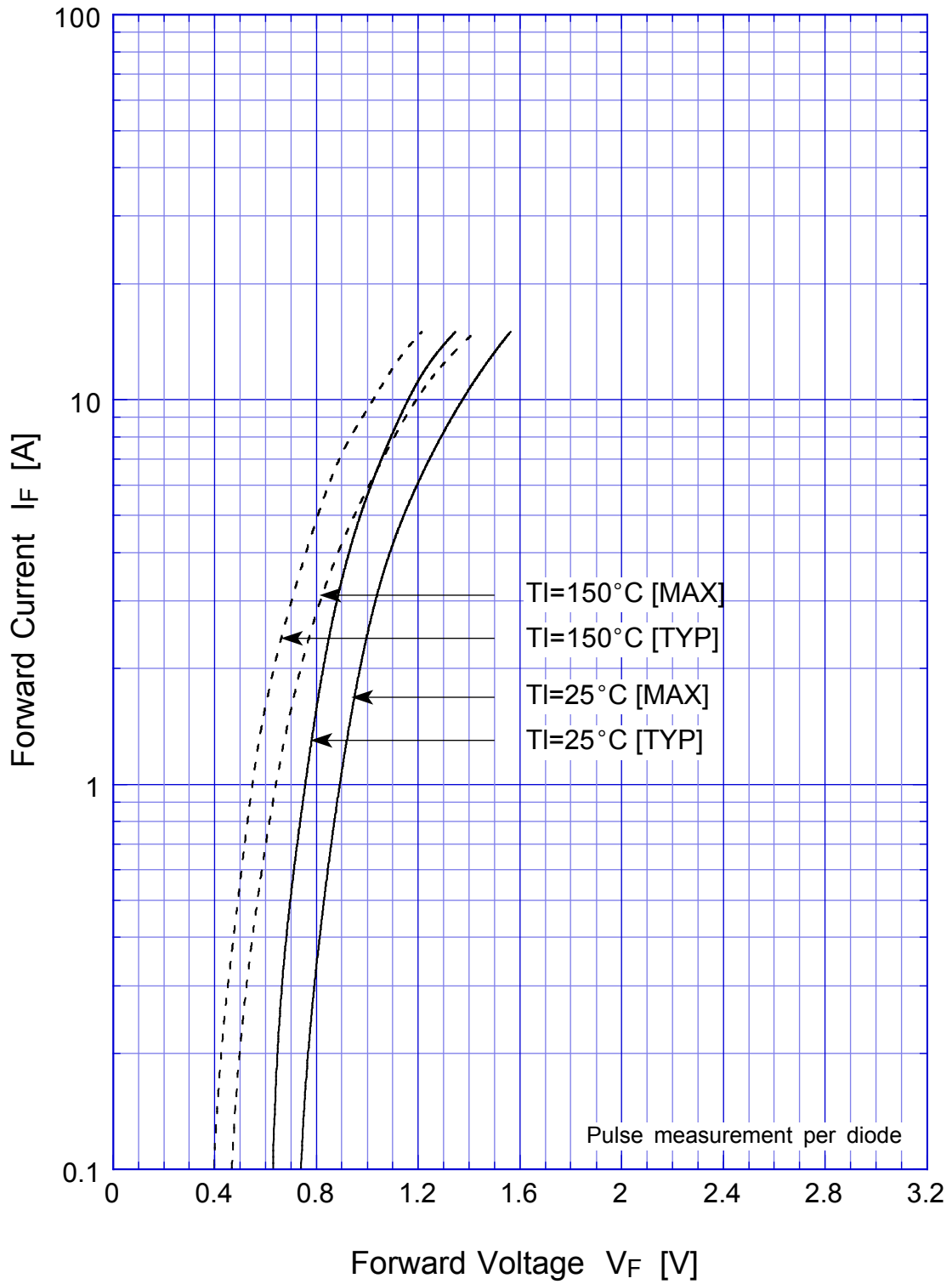
| Item | Symbol | Conditions | Ratings | Unit |
|-----------------------------------|------------------|--|---------|------|
| Storage Temperature | Tstg | | -40~150 | °C |
| Operating Junction Temperature | Tj | | 150 | °C |
| Maximum Reverse Voltage | V _{RM} | | 200 | V |
| Average Rectified Forward Current | I _O | 50Hz sine wave, R-load, Tl=128°C | 3 | A |
| | | 50Hz sine wave, R-load, Ta=25°C | 2.1 | |
| Peak Surge Forward Current | I _{FSM} | 50Hz sine wave, Non-repetitive 1 cycle peak value, Tj=25°C | 60 | A |

● Electrical Characteristics (If not specified Tl=25°C)

| Item | Symbol | Conditions | Ratings | Unit |
|-----------------------|-----------------|---|----------|------|
| Forward Voltage | V _F | I _F =2.1A, Pulse measurement | Max.0.98 | V |
| Reverse Current | I _R | V _R =V _{RM} , Pulse measurement | Max.10 | μA |
| Reverse Recovery Time | trr | I _F =0.5A, I _R =1A | Max.35 | ns |
| Thermal Resistance | θ _{jl} | junction to lead | Max.6.5 | °C/W |
| | θ _{ja} | junction to ambient | Max.60 | |

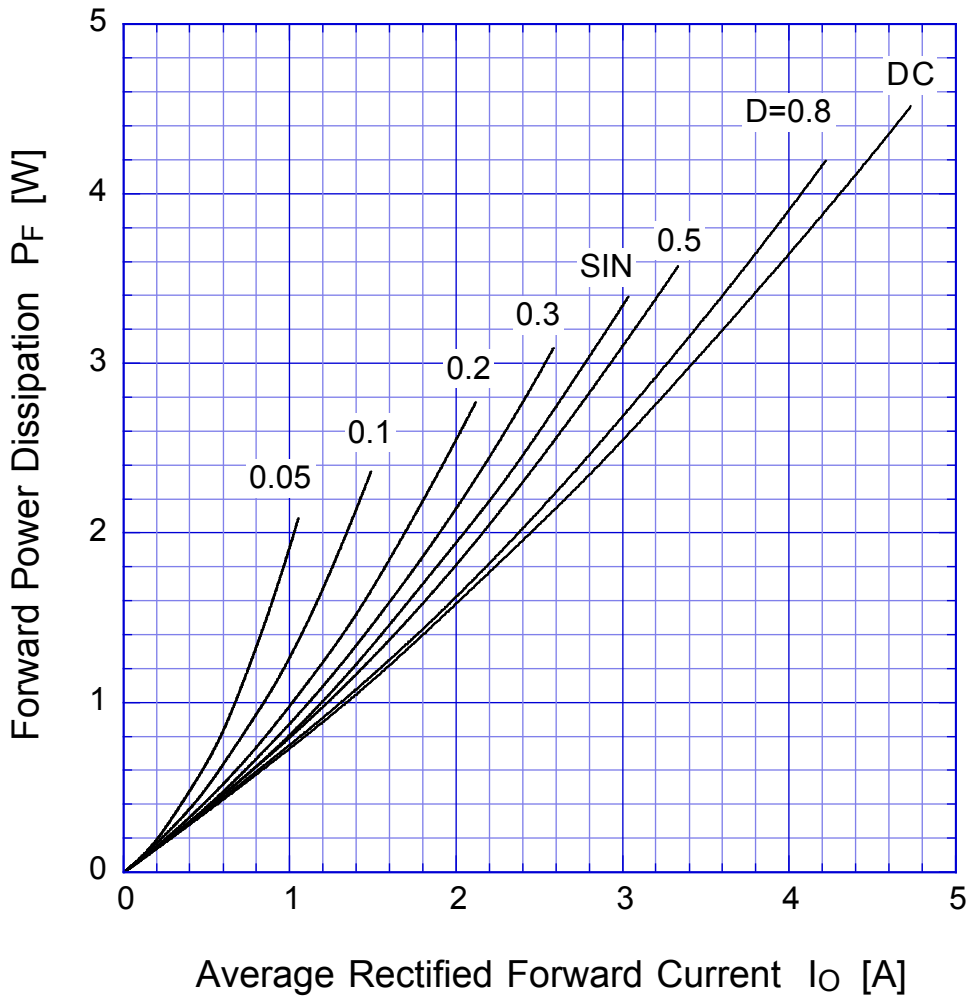
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Forward Voltage

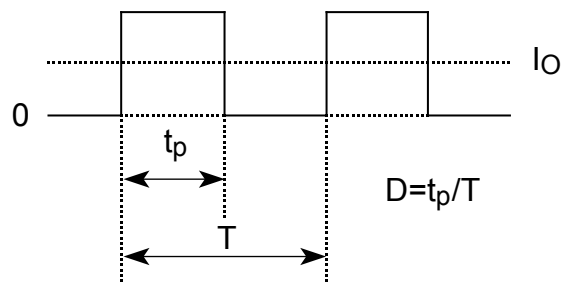


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Forward Power Dissipation

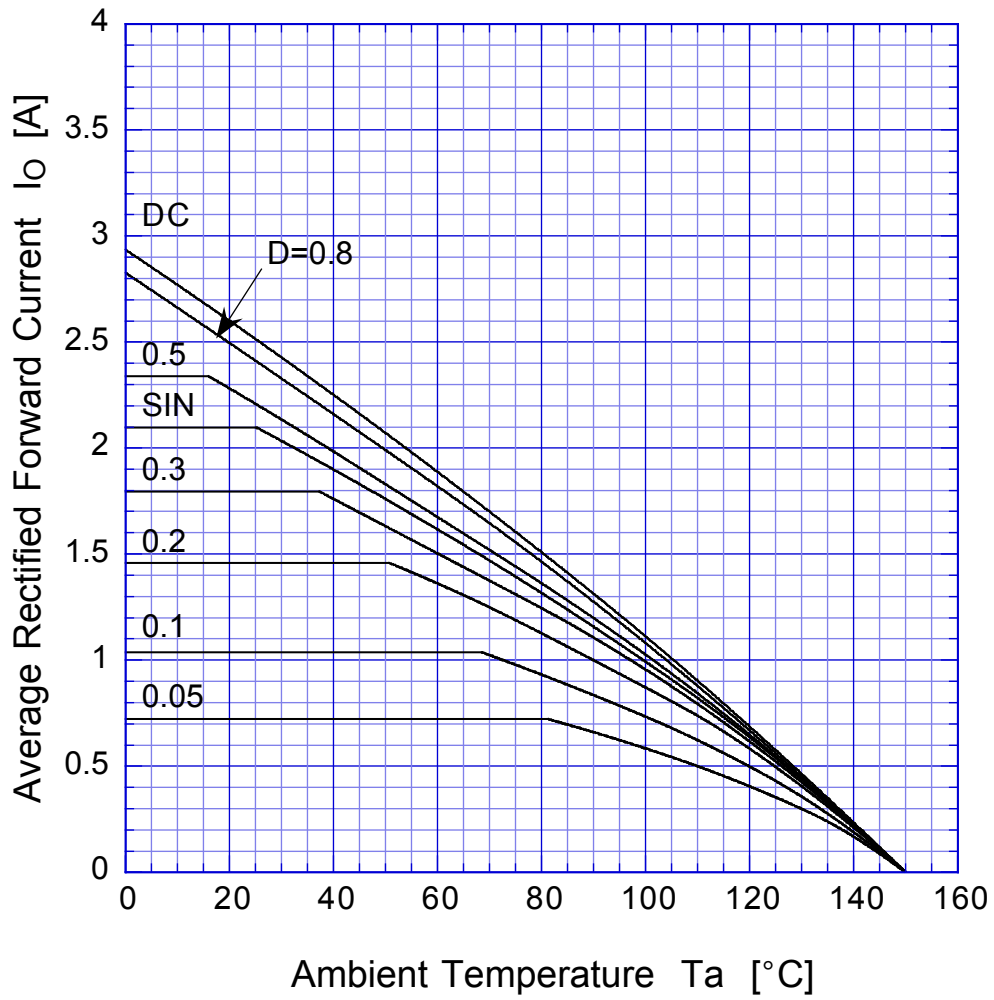


$T_j = T_{jmax}$



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Derating Curve

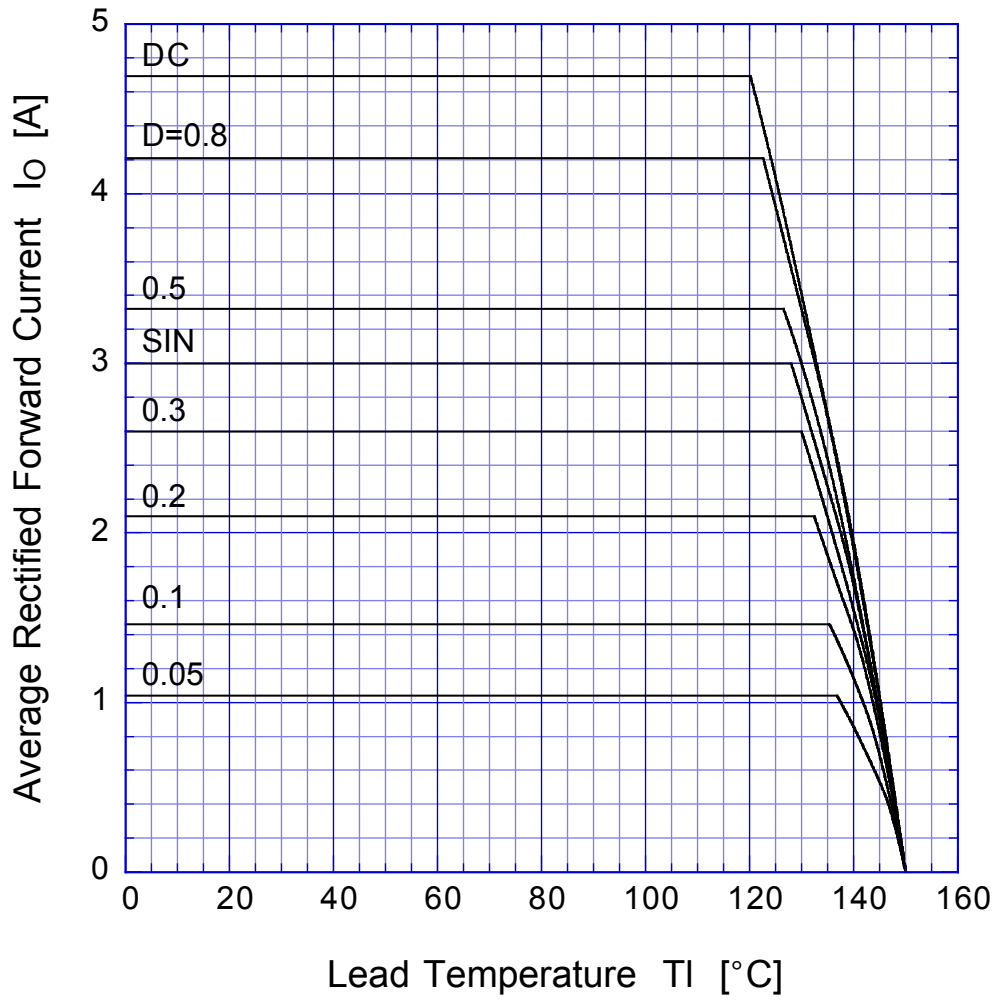


$$V_R = V_{RM}$$



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Derating Curve

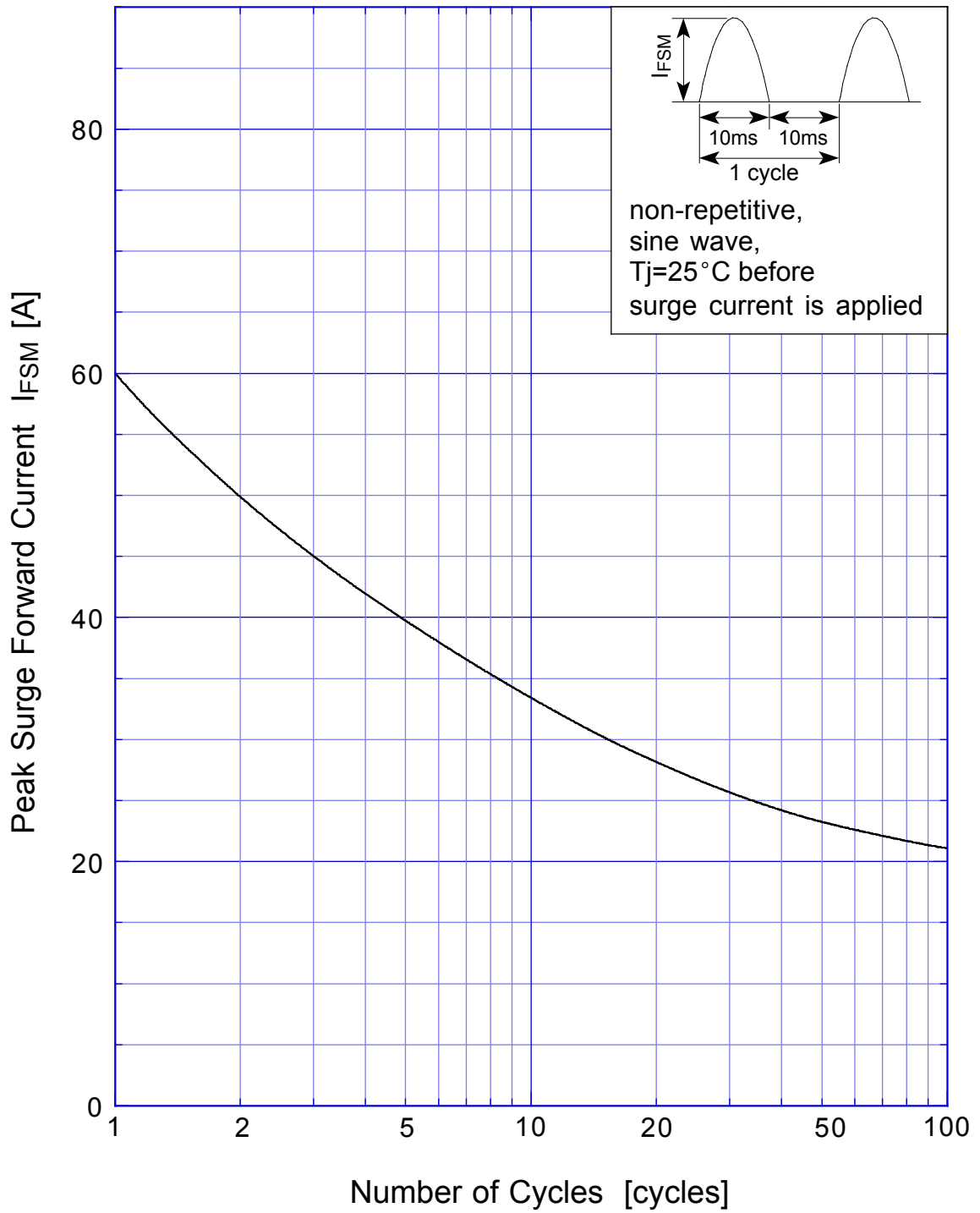


$$V_R = V_{RM}$$



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Peak Surge Forward Capability



S3L20U Junction Capacitance

