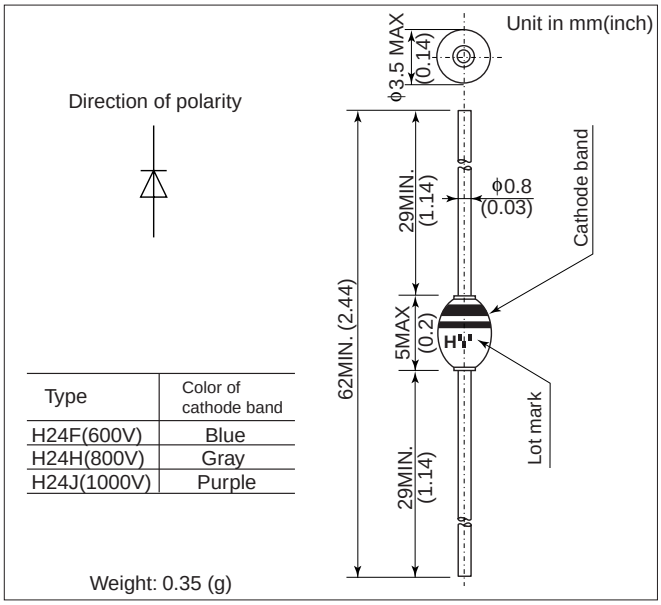
# H24

## FEATURES

- Transient surge voltage protection.
- Diffused-junction. Glass passivated and encapsulated.

## OUTLINE DRAWING




| Type | Color of cathode band |
|---|---|
| H24F(600V) | Blue |
| H24H(800V) | Gray |
| H24J(1000V) | Purple |

## ABSOLUTE MAXIMUM RATINGS

| Items | Type | | H24F | H24H | H24J |
|---|---|---|---|---|---|
| Repetitive Peak Reverse Voltage | $V_{RRM}$ | V | 600 | 800 | 1000 |
| Peak Reverse Power | $P_{RM}$ | kW | 1( Ta = 25°C,Pulse duration 20μs Non-repetitive ) | | |
| Average Forward Current | $I_{F(AV)}$ | A | 1.0( Single-phase half sine wave 180° conduction, Lead length = 10mm ) | | |
| Surge(Non-Repetitive) Forward Current | $I_{FSM}$ | A | 45( Without PIV, 10ms conduction, Tj max start ) | | |
| $I^2t$ Limit Value | $I^2t$ | $A^2s$ | 8( Time = 2 ~ 10ms, I = RMS value ) | | |
| Operating Junction Temperature | $T_j$ | °C | 175 | 165 | |
| Storage Temperature | $T_{stg}$ | °C | -65 ~ +175 | | |

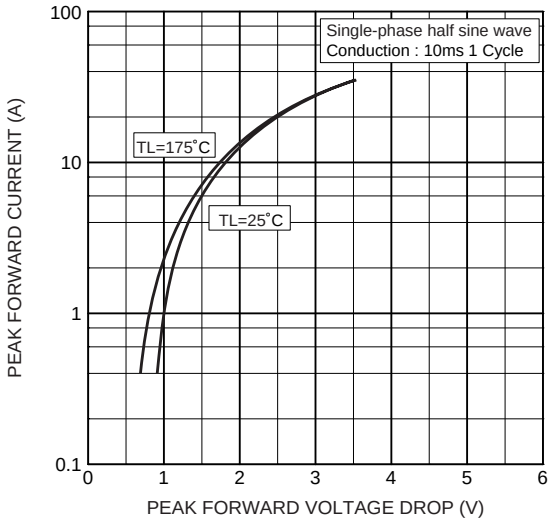
Notes (1) Lead mounting : Lead temperature 300° C max. to 3.2mm from body for 5sec. max..
(2) Mechanical strength : Bending 90°×2 cycles or 180°×1 cycle, Tensile 2kg, Twist 90°×1 cycle.

## CHARACTERISTICS($T_L$=25°C)

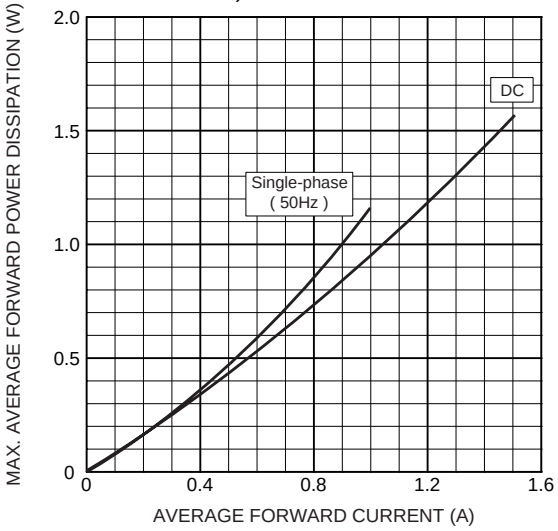
| Items | Symbols | Units | Min. | Typ. | Max. | Test Conditions |
|---|---|---|---|---|---|---|
| Peak Reverse Current | $I_{RRM}$ | μA | — | — | 5 | All class, Rated $V_{RRM}$ |
| Peak Forward Voltage | $V_{FM}$ | V | — | — | 1.0 | $I_{FM}$=1.0Ap, Single-phase half sine wave 1 cycle |
| Reverse Recovery Time | trr | μs | — | 3.0 | — | $I_F$=2mA, $V_R$=-15V |
| Avalanche Voltage | $V_{AVL}$ | V | 750 | — | — | $I_{RM}$=1.0mA, Single-phase half sine wave 1 pps, Time ≤5s |
| | | | 1000 | — | — | |
| | | | 1250 | — | — | |
| Steady State Thermal Impedance | $R_{th(j-a)}$ | °C/W | — | — | 80 | Lead length = 10 mm |
| | $R_{th(j-l)}$ | | | | 50 | |

# H24

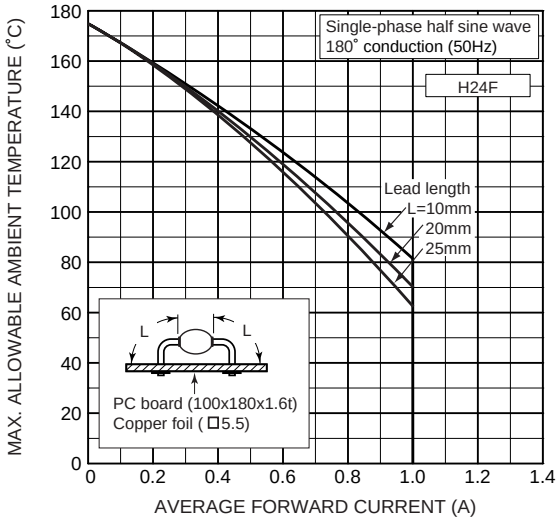
Forward characteristics



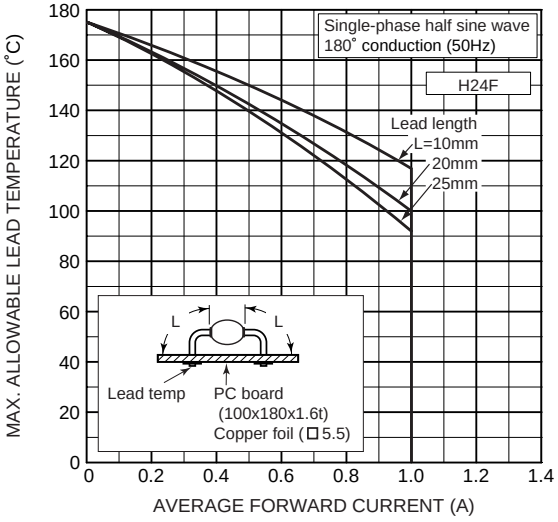

Max. average forward power dissipation
(Resistive or inductive load)



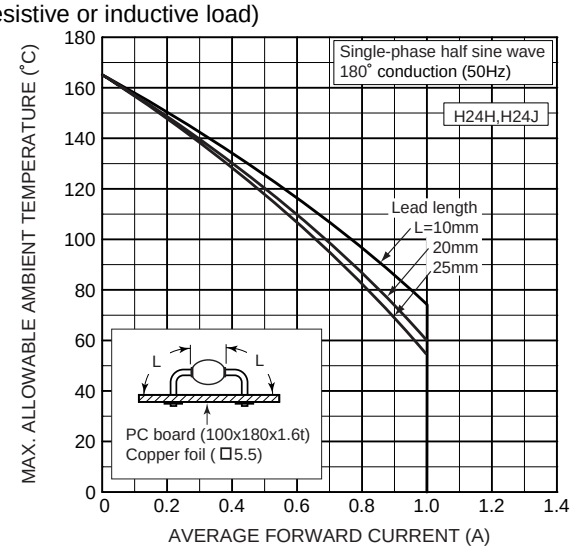

Max. allowable ambient temperature
(Resistive or inductive load)



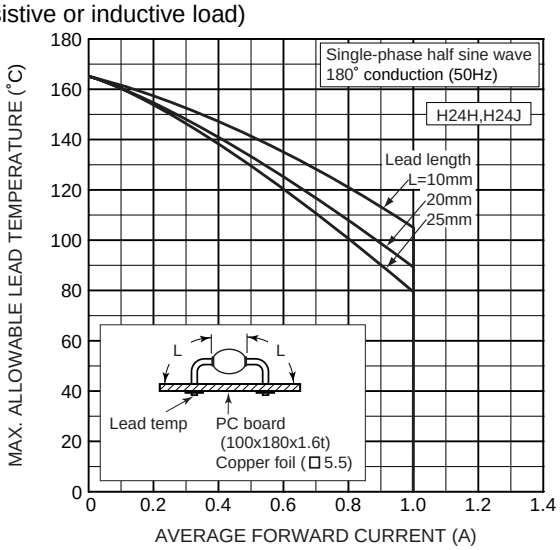

Max. allowable lead temperature
(Resistive or inductive load)



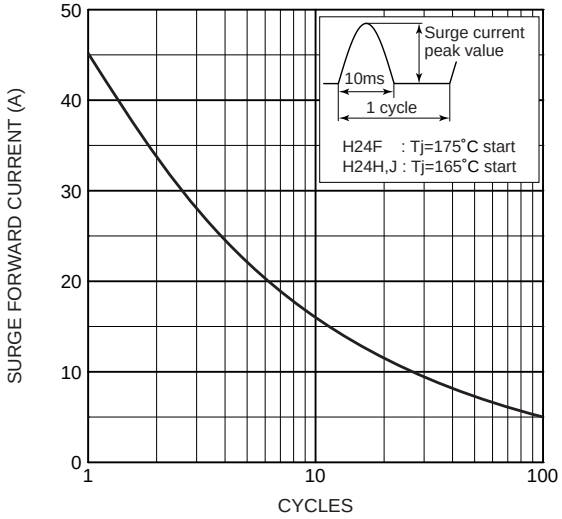

Max. allowable ambient temperature
(Resistive or inductive load)



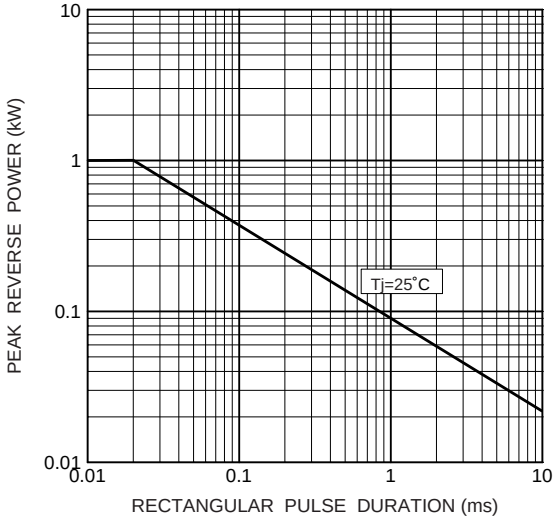

Max. allowable lead temperature
(Resistive or inductive load)



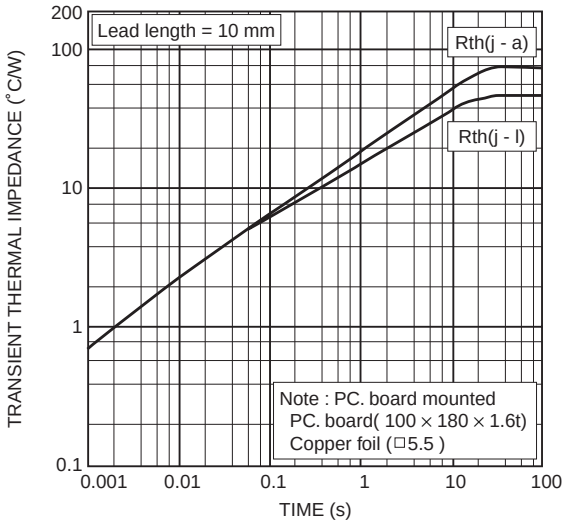
Surge forward current characteristics
(Non-repetitive)




Typical reverse power characteristics
(Non-repetitive)




Transient thermal impedance



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