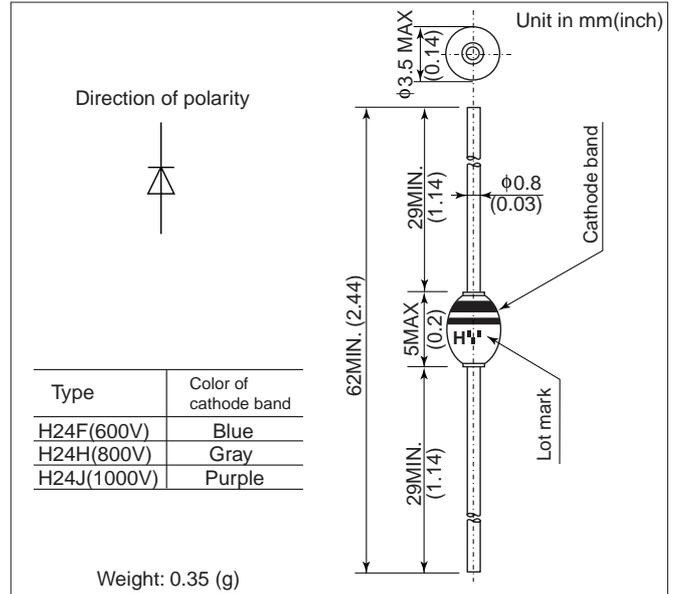


# H24

## FEATURES

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

## OUTLINE DRAWING



## 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 ( $T_a = 25^\circ\text{C}$ , Pulse duration 20 $\mu\text{s}$ 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, $T_j$ max start )		
$I^2t$ Limit Value	$I^2t$	$\text{A}^2\text{s}$	8( Time = 2 ~ 10ms, I = RMS value )		
Operating Junction Temperature	$T_j$	$^\circ\text{C}$	175	165	
Storage Temperature	$T_{stg}$	$^\circ\text{C}$	-65 ~ +175		

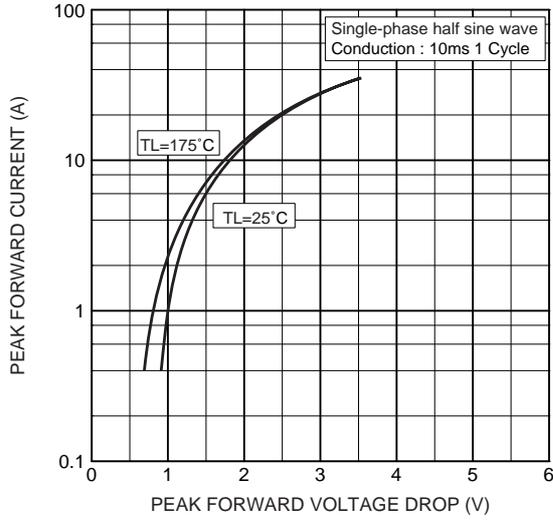
- Notes (1) Lead mounting : Lead temperature 300 $^\circ\text{C}$  max. to 3.2mm from body for 5sec. max..  
 (2) Mechanical strength : Bending 90 $^\circ$ ×2 cycles or 180 $^\circ$ ×1 cycle, Tensile 2kg, Twist 90 $^\circ$ ×1 cycle.

## CHARACTERISTICS( $T_L=25^\circ\text{C}$ )

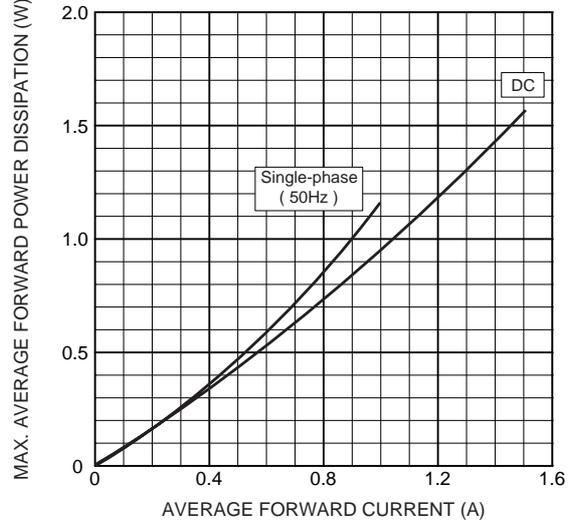
Items	Symbols	Units	Min.	Typ.	Max.	Test Conditions
Peak Reverse Current	$I_{RRM}$	$\mu\text{A}$	—	—	5	All class, Rated $V_{RRM}$
Peak Forward Voltage	$V_{FM}$	V	—	—	1.0	$I_{FM}=1.0\text{Ap}$ , Single-phase half sine wave 1 cycle
Reverse Recovery Time	$t_{rr}$	$\mu\text{s}$	—	3.0	—	$I_F=2\text{mA}$ ,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

# H24

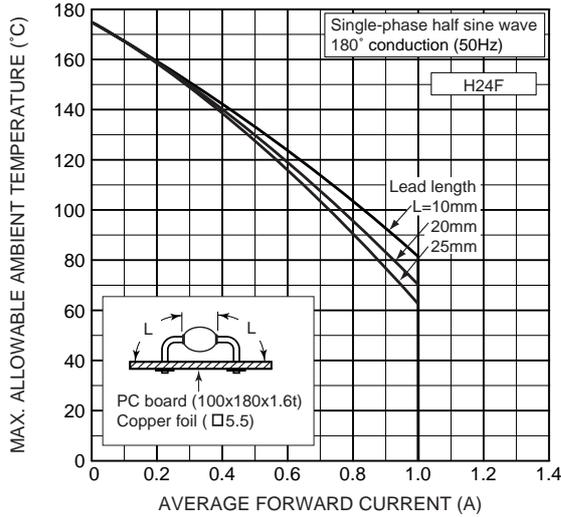
Forward characteristics



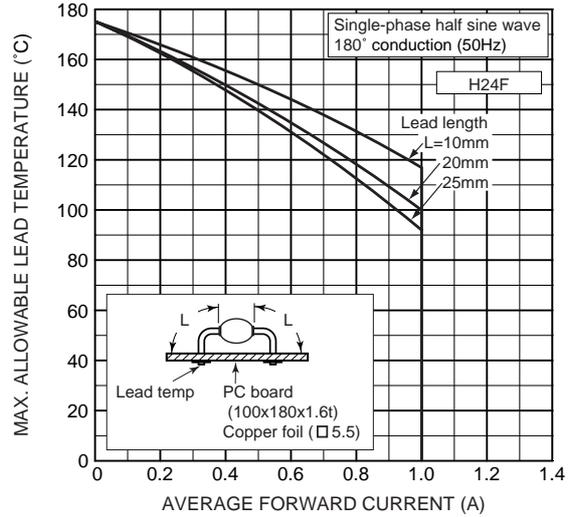
Max. average forward power dissipation (Resistive or inductive load)



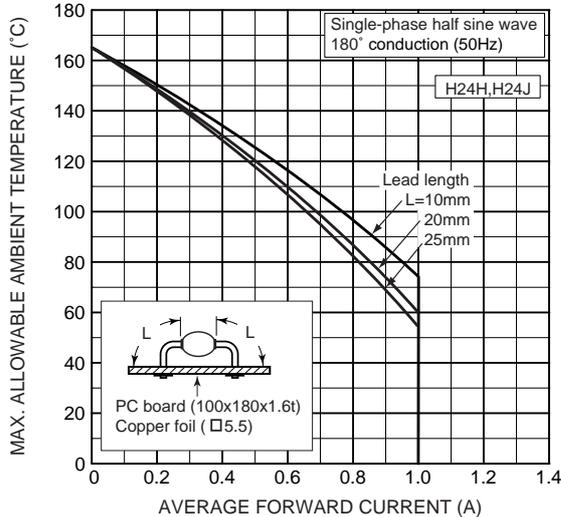
Max. allowable ambient temperature (Resistive or inductive load)



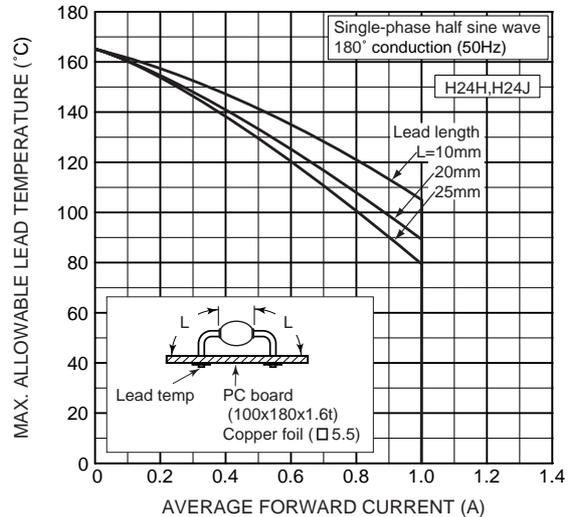
Max. allowable lead temperature (Resistive or inductive load)



Max. allowable ambient temperature (Resistive or inductive load)

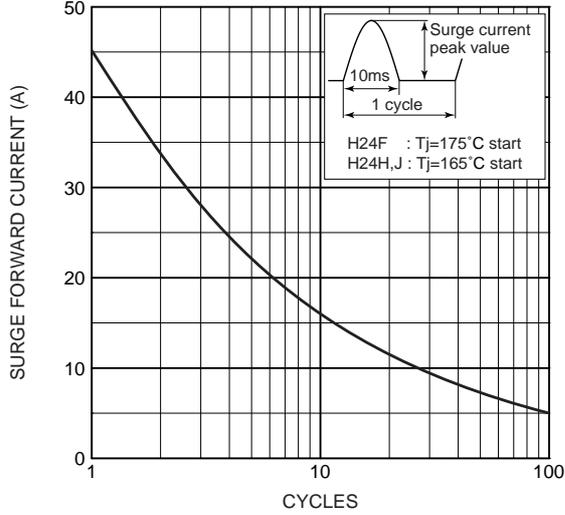


Max. allowable lead temperature (Resistive or inductive load)

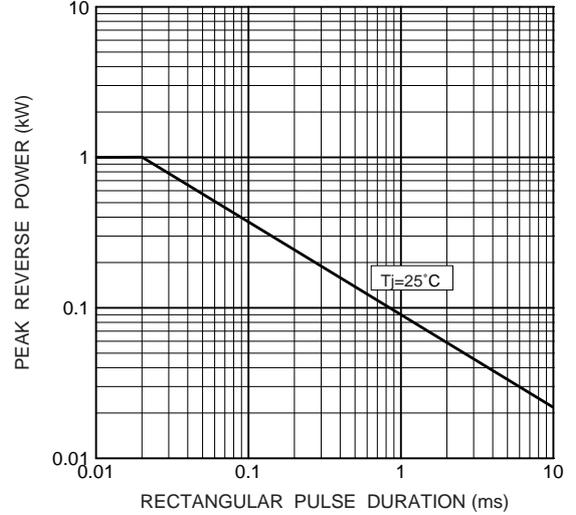


# H24

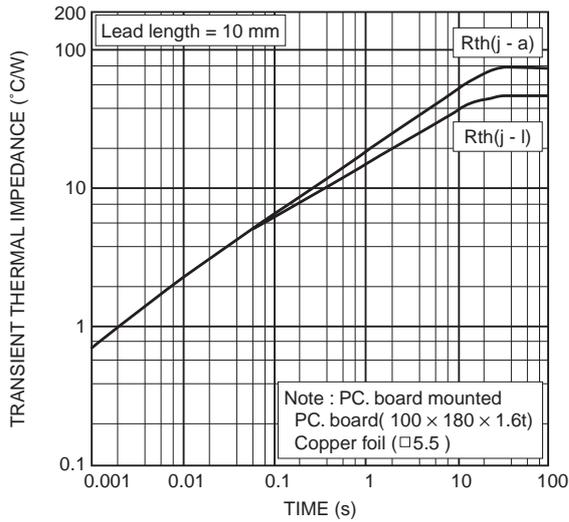
Surge forward current characteristics  
(Non-repetitive)



Typical reverse power characteristics  
(Non-repetitive)



Transient thermal impedance



# HITACHI POWER SEMICONDUCTORS

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