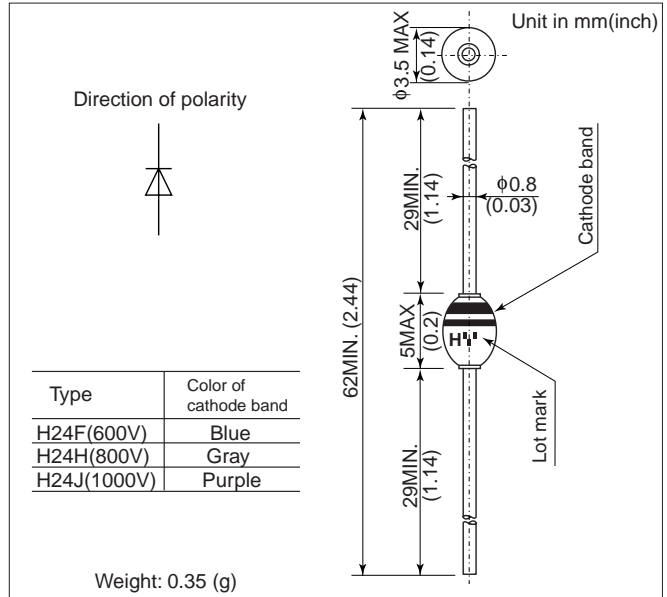


H24

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 μs 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	A^2s	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		

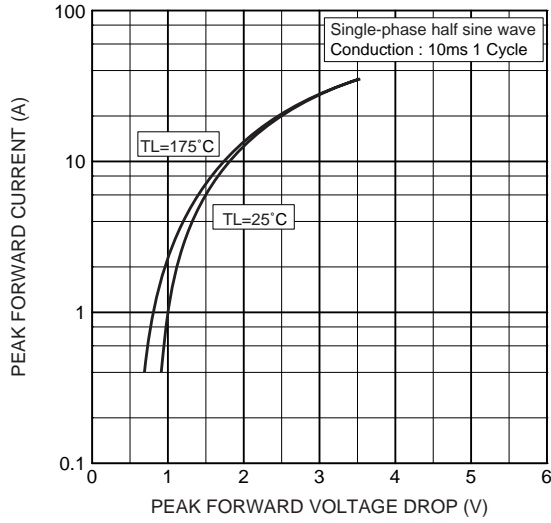
- Notes (1) Lead mounting : Lead temperature 300 $^\circ\text{C}$ max. to 3.2mm from body for 5sec. max..
 (2) Mechanical strength : Bending 90 $^\circ$ ×2 cycles or 180 $^\circ$ ×1 cycle, Tensile 2kg, Twist 90 $^\circ$ ×1 cycle.

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

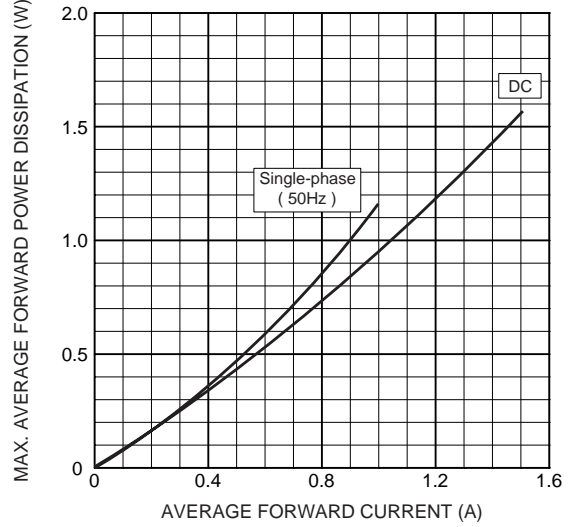
Items	Symbols	Units	Min.	Typ.	Max.	Test Conditions
Peak Reverse Current	I_{RRM}	μA	—	—	5	All class, Rated V_{RRM}
Peak Forward Voltage	V_{FM}	V	—	—	1.0	$I_{FM}=1.0\text{Ap}$, Single-phase half sine wave 1 cycle
Reverse Recovery Time	t_{rr}	μs	—	3.0	—	$I_F=2\text{mA}$, $V_R=-15\text{V}$
Avalanche Voltage	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

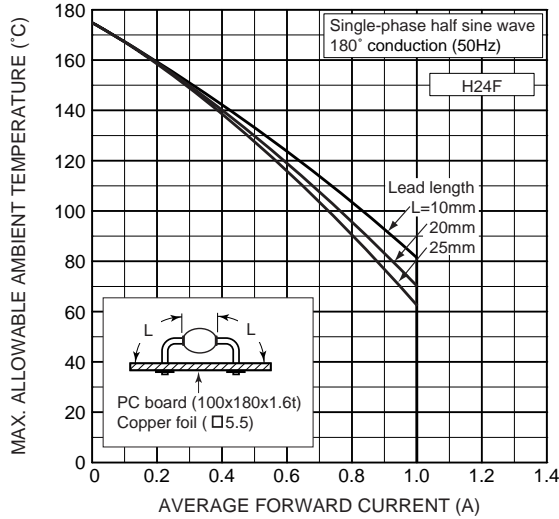
Forward characteristics



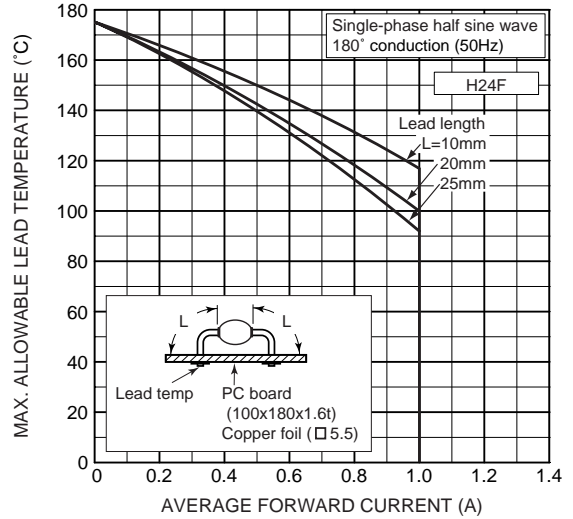
Max. average forward power dissipation (Resistive or inductive load)



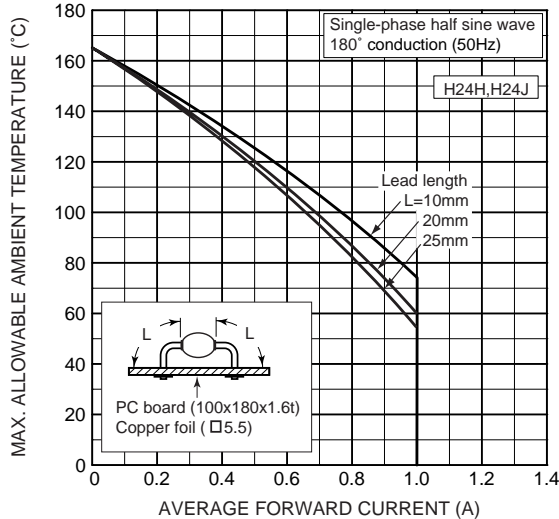
Max. allowable ambient temperature (Resistive or inductive load)



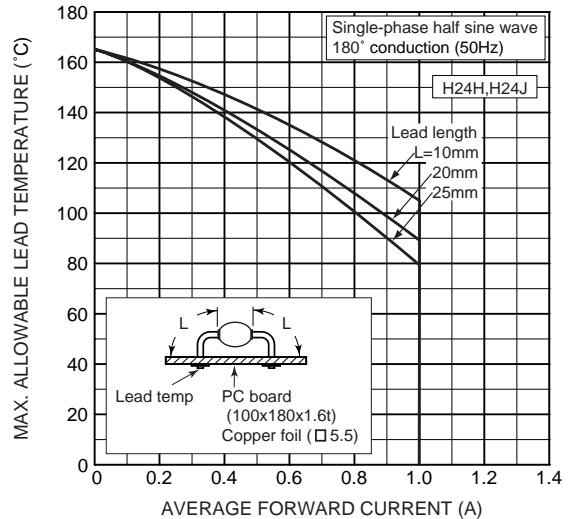
Max. allowable lead temperature (Resistive or inductive load)



Max. allowable ambient temperature (Resistive or inductive load)

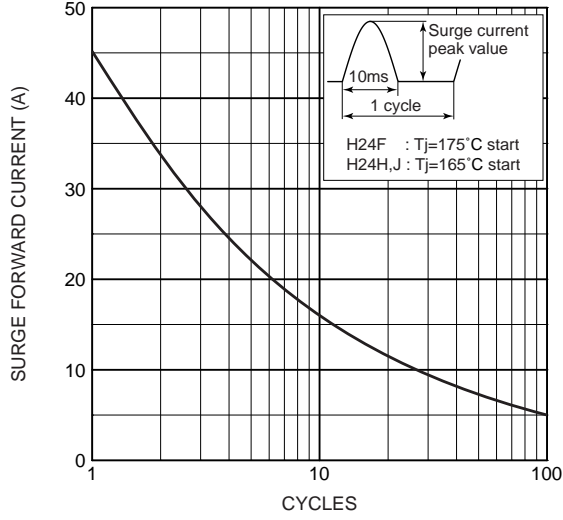


Max. allowable lead temperature (Resistive or inductive load)

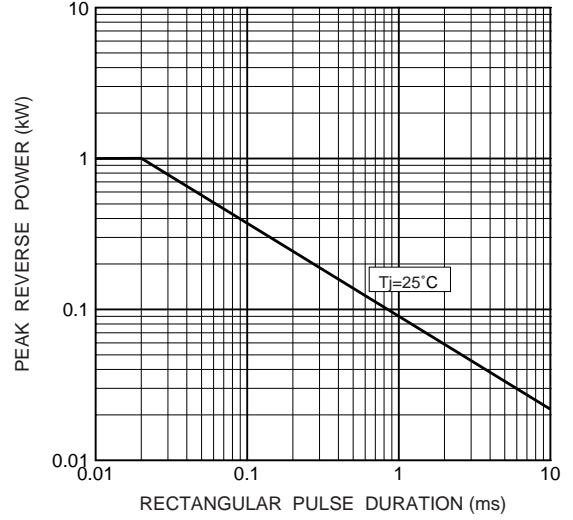


H24

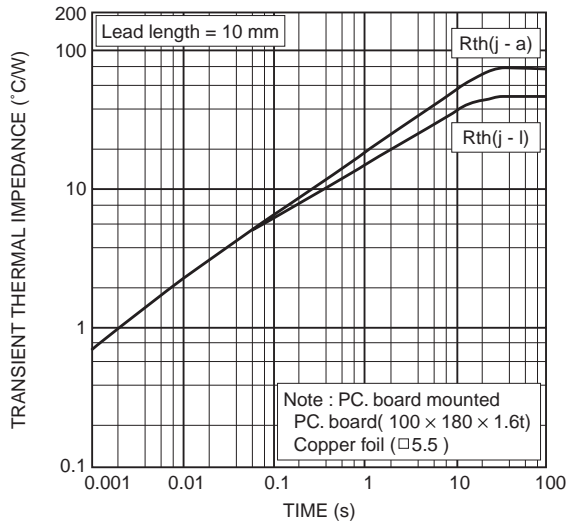
Surge forward current characteristics
(Non-repetitive)



Typical reverse power characteristics
(Non-repetitive)



Transient thermal impedance



HITACHI POWER SEMICONDUCTORS

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