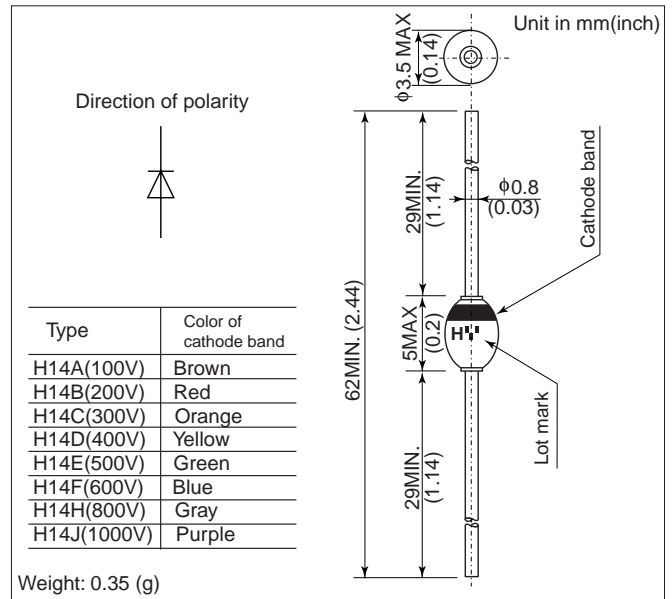


H14

FEATURES

- For general purpose.
- Diffused-junction. Glass passivated and encapsulated.

OUTLINE DRAWING



ABSOLUTE MAXIMUM RATINGS

Item	Type		H14A	H14B	H14C	H14D	H14E	H14F	H14H	H14J	
Repetitive Peak Reverse Voltage	V_{RRM}	V	100	200	300	400	500	600	800	1000	
Non-Repetitive Peak Reverse Voltage	V_{RSM}	V	120	240	360	480	600	720	960	1200	
Average Forward Current	$I_{F(AV)}$	A	1.0 (single-phase half sine wave 180° conduction L=10mm)								
			$T_L=115^\circ\text{C}$							$T_L=105^\circ\text{C}$	
Surge(Non-Repetitive) Forward Current	I_{FSM}	A	45 (Without PIV, 10ms conduction, Tj max start)								
I^2t Limit Value	I^2t	A ² s	8 (Time = 2 ~ 10ms, I = RMS value)								
Operating Junction Temperature	T_j	°C	-40 ~ +175						-40 ~ +165		
Storage Temperature	T_{sig}	°C	-40 ~ +175								

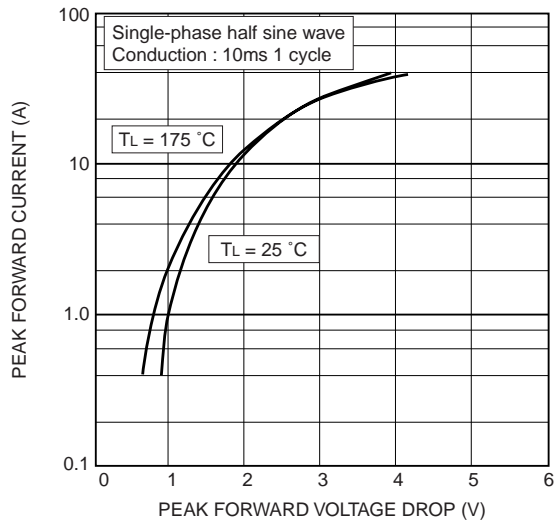
- Notes (1) Lead mounting : Lead temperature 300°C max. to 3.2mm from body for 5sec. max..
 (2) Mechanical strength : Bending 90°×2 cycles or 180°×1 cycle, Tensile 2kg, Twist 90°×1 cycle.

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

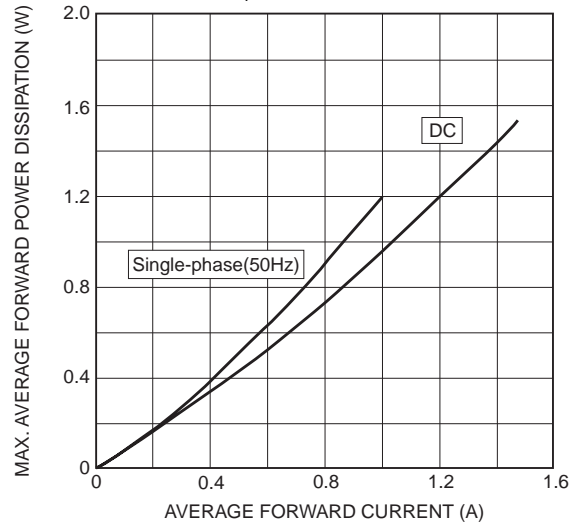
Item	Symbols	Units	Min.	Typ.	Max.	Test Conditions
Peak Reverse Current	I_{RRM}	μA	—	—	5.0	All class Rated V_{RRM}
Peak Forward Voltage	V_{FM}	V	—	—	1.0	$I_{FM}=1.0A_p$, Single-phase half sine wave 1 cycle
Reverse Recovery Time	t_{rr}	μs	—	3.0	—	$I_F=2mA$, $V_R=-15V$
Steady State Thermal Impedance	$R_{th(j-a)}$	°C/W	—	—	80	Lead length = 10 mm
	$R_{th(j-l)}$				50	
Junction Capacitance	C_j	pF	—	50	—	$V_R=0V$
			—	8	—	$V_R=-50V$

H14

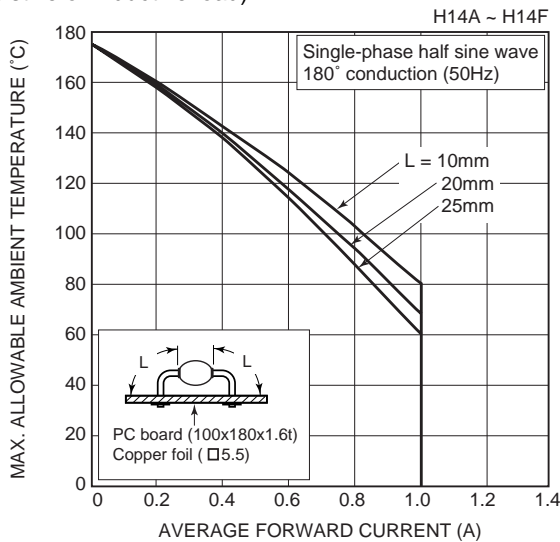
Forward characteristic



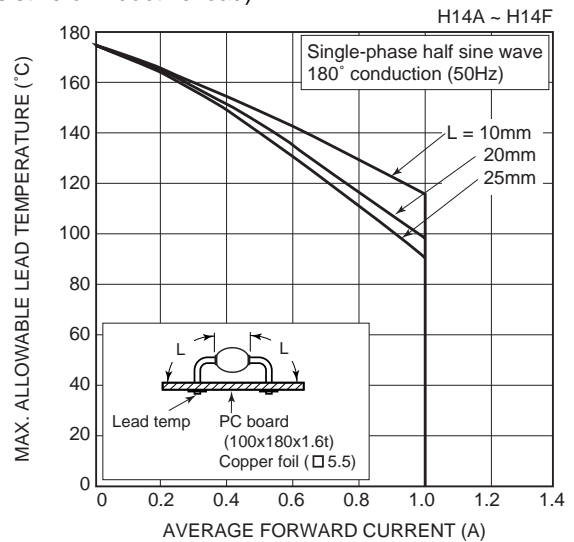
Max. average forward power dissipation (Resistive or inductive load)



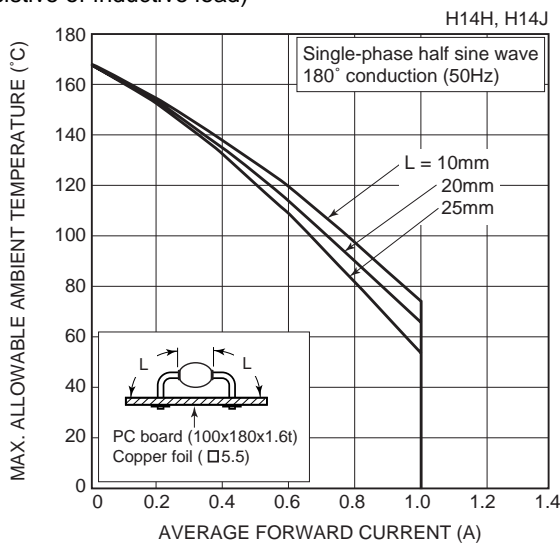
Max. allowable ambient temperature (Resistive or inductive load)



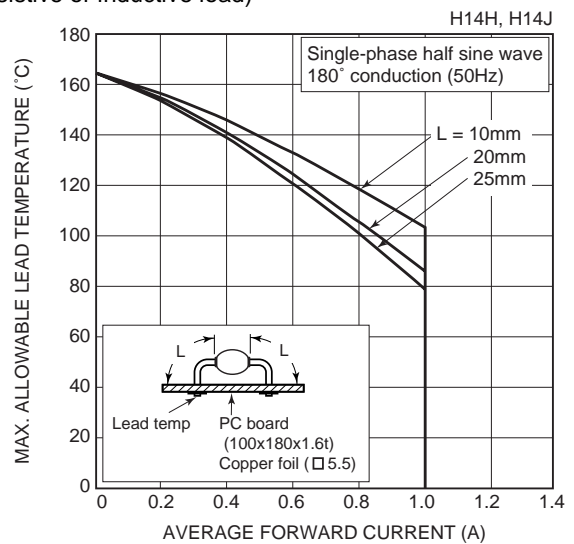
Max. allowable lead temperature (Resistive or inductive load)



Max. allowable ambient temperature (Resistive or inductive load)

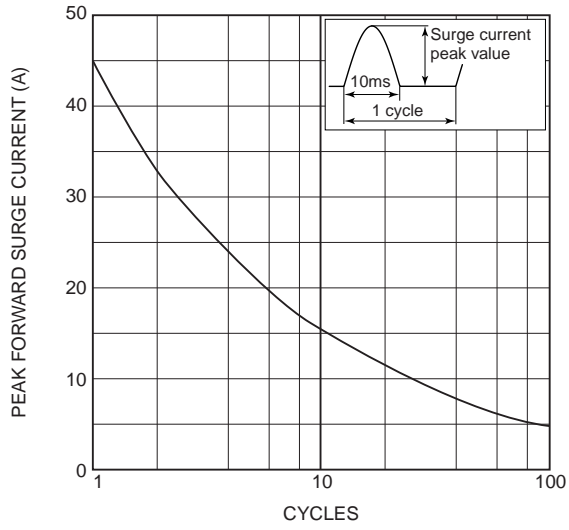


Max. allowable lead temperature (Resistive or inductive load)

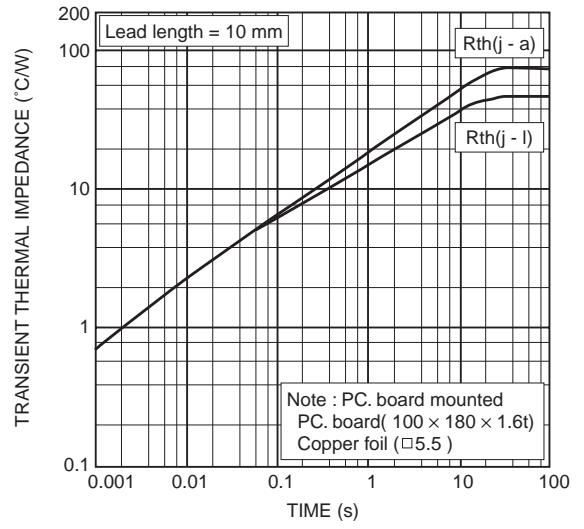


H14

Surge forward current characteristic
(Non-repetitive)



Transient thermal impedance



HITACHI POWER SEMICONDUCTORS

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