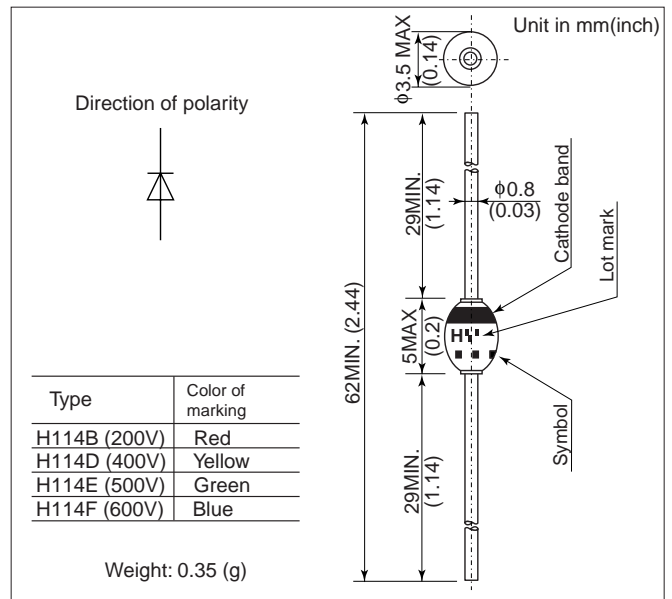


# H114

## FEATURES

- For high speed switching.
- Diffused-junction. Glass passivated and encapsulated.

## OUTLINE DRAWING



## ABSOLUTE MAXIMUM RATINGS

Items	Type		H114B	H114D	H114E	H114F
Repetitive Peak Reverse Voltage	$V_{RRM}$	V	200	400	500	600
Non-Repetitive Peak Reverse Voltage	$V_{RSM}$	V	240	480	600	720
Average Forward Current	$I_{F(AV)}$	A	1.0 (Single-phase half sine wave 180° conduction TL = 80°C, Lead length = 10mm)			
Surge(Non-Repetitive) Forward Current	$I_{FSM}$	A	40( Without PIV, 10ms conduction, Tj = 150°C start )			
I <sup>2</sup> t Limit Value	I <sup>2</sup> t	A <sup>2</sup> s	6.4( Time = 2 ~ 10ms, I = RMS value )			
Operating Junction Temperature	T <sub>j</sub>	°C	-40 ~ +150			
Storage Temperature	T <sub>stg</sub>	°C	-40 ~ +175			

Notes (1) Lead mounting : Lead temperature 300°C max. to 3.2mm from body for 5sec. max..

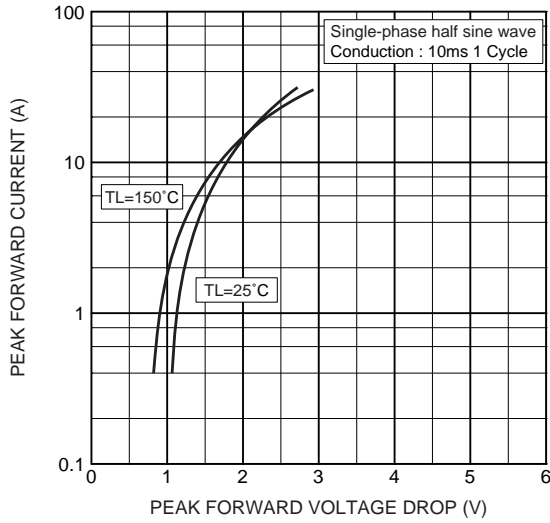
(2) Mechanical strength : Bending 90°×2 cycles or 180°×1 cycle, Tensile 2kg, Twist 90°×1 cycle.

## CHARACTERISTICS(T<sub>L</sub>=25°C)

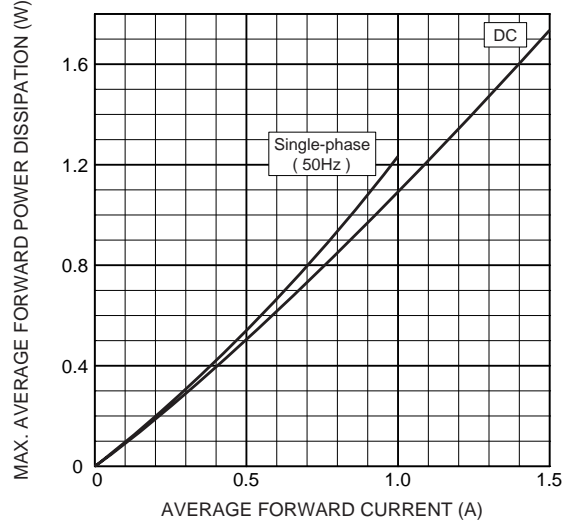
Items	Symbols	Units	Min.	Typ.	Max.	Test Conditions
Peak Reverse Current	$I_{RRM}$	μA	—	—	5	Rated $V_{RRM}$
Peak Forward Voltage	$V_{FM}$	V	—	—	1.15	$I_{FM}=1.0 A_p$ , Single-phase half sine wave 1 cycle
Reverse Recovery Time	trr	μs	—	—	0.2	$I_F=0.4A$ , $I_{rp}=0.8A$ , 25% Recovery
Steady State Thermal Impedance	$R_{th(j-a)}$	°C/W	—	—	80	Lead length = 10 mm
	$R_{th(j-l)}$				50	

# H114

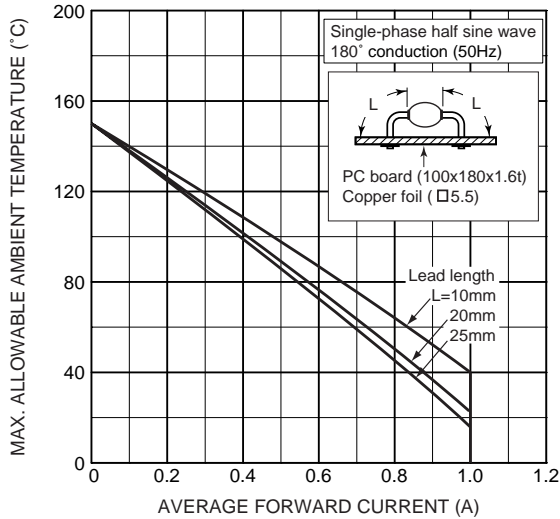
Forward characteristics



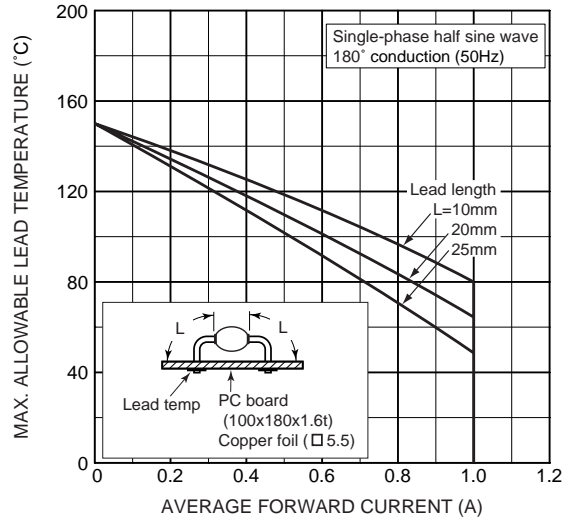
Max. average forward power dissipation (Resistive or inductive load)



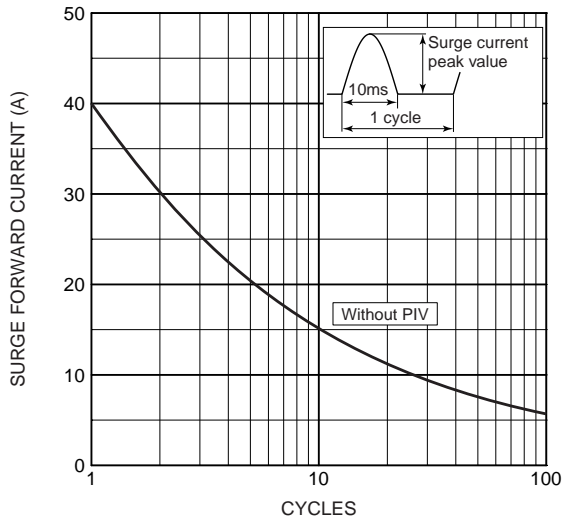
Max. allowable ambient temperature (Resistive or inductive load)



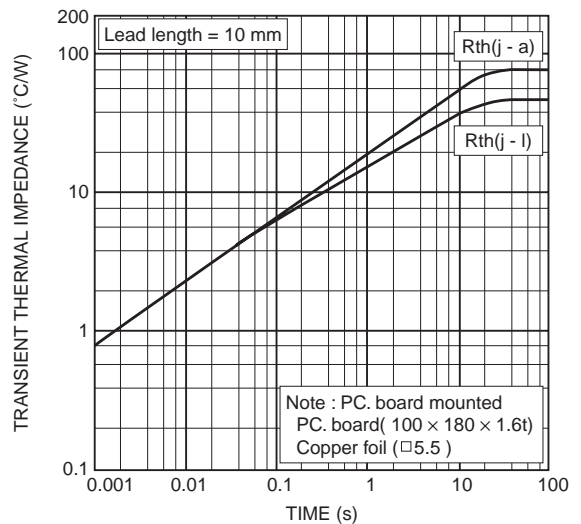
Max. allowable lead temperature (Resistive or inductive load)



Surge forward current characteristic (Non-repetitive)

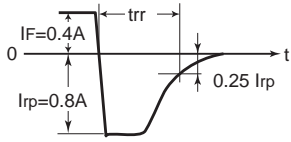
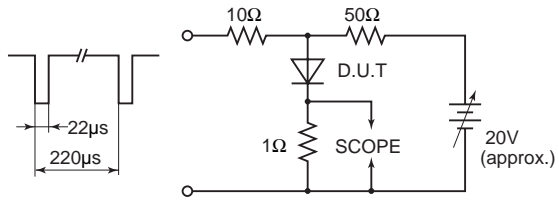


Transient thermal impedance



# H114

Reverse recovery time ( $t_{rr}$ ) test circuit



# HITACHI POWER SEMICONDUCTORS

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