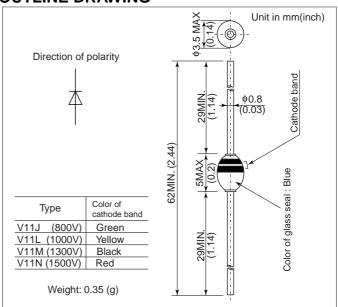
V11

FEATURES

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

OUTLINE DRAWING



ABSOLUTE MAXIMUM RATINGS

Items	Type		V11J	V11L	V11M	V11N			
Repetitive Peak Reverse Voltage	V_{RRM}	V	800	1000	1300	1500			
Non-Repetitive Peak Reverse Voltage	V_{RSM}	V	1000	1300	1600	1800			
Average Forward Current	I _{F(AV)}	А	0.4 Single-phase half sine wave 180° conduction TL = 100°C, Lead length = 10mm						
Surge(Non-Repetitive) Forward Current	I _{FSM}	Α	30(Without PIV, 10ms conduction, Tj = 150°C start)						
I ² t Limit Value	l ² t	A ² s	3.6(Time = 2 ~ 10ms, I = RMS value)						
Operating Junction Temperature	T _j	°C	-65 ~ +150						
Storage Temperature	T_{stg}	°C	-65 ~ +200						

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

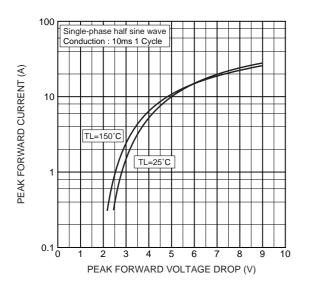
(2) Mechanical strength: Bending 90°×2 cycles or 180°×1 cycle, Tensile 2kg, Twist 90°×1 cycle.

CHARACTERISTICS(T_L=25°C)

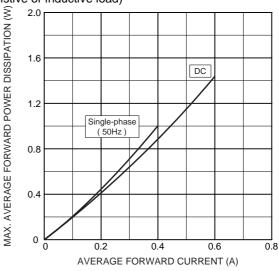
<u> </u>									
Items	Symbols	Units	Min.	Тур.	Max.	Test Conditions			
Peak Reverse Current	I _{RRM}	μΑ	_	2.0	10	Rated V _{RRM}			
Peak Forward Voltage	V_{FM}	V	_	_	2.5	I _{FM} =0.4 Ap, Single-phase half sine wave 1 cycle			
Reverse Recovery Time	trr	μs	_	_	0.4	I _F =2mA, V _R =-15V			
Steady State Thermal Impedance	$R_{th(j-a)}$ $R_{th(j-l)}$	°C/W	_	_	80 50	Lead length = 10 mm			

V11

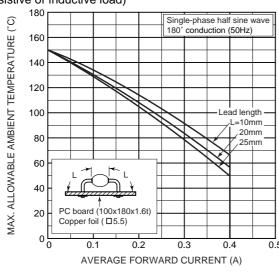
Forward characteristics



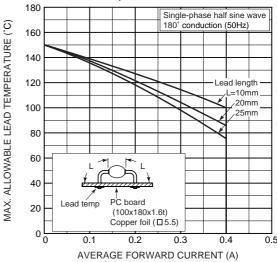
Max. average forward power dissipation (Resistive or inductive load)



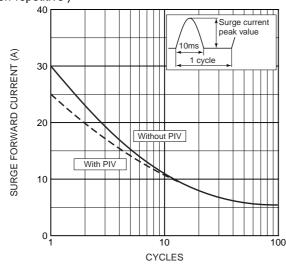
Max. allowable ambient temperature (Resistive or inductive load)



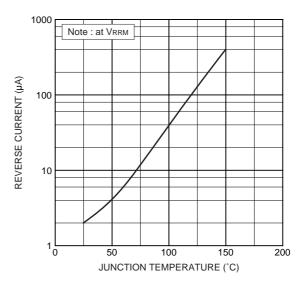
Max. allowable lead temperature (Resistive or inductive load)



Surge forward current characteristic (Non-repetitive)

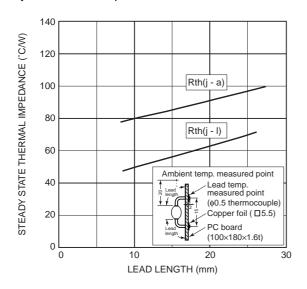


Typ. reverse current vs. junction temperature

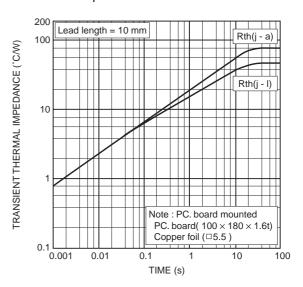


V11

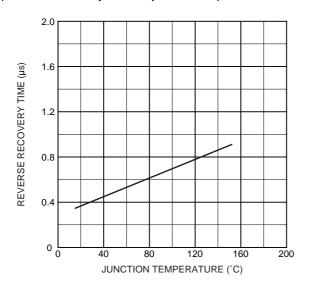
Steady state thermal impedance



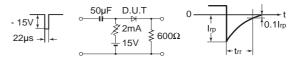
Transient thermal impedance



Typ. reverse recovery time vs. junction temperature



Reverse recovery time(trr) test circuit



HITACHI POWER SEMICONDUCTORS

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