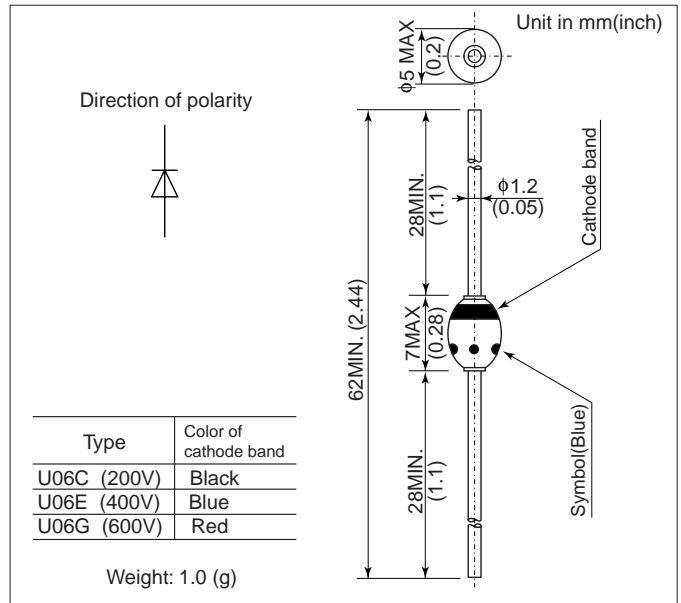


U06

FEATURES

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

OUTLINE DRAWING



ABSOLUTE MAXIMUM RATINGS

Items	Type	U06C	U06E	U06G
Repetitive Peak Reverse Voltage	V_{RRM}	V	200	400
Non-Repetitive Peak Reverse Voltage	V_{RSM}	V	300	500
Average Forward Current	$I_{F(AV)}$	A	2.0 (Single-phase half sine wave 180° conduction TL = 75°C, Lead length = 10mm)	
Surge(Non-Repetitive) Forward Current	I_{FSM}	A	80 (Without PIV, 10ms conduction, Tj = 150°C start)	
I ² t Limit Value	I ² t	A ² s	25.6 (Time = 2 ~ 10ms, I = RMS value)	
Operating Junction Temperature	T _j	°C	-65 ~ +150	
Storage Temperature	T _{stg}	°C	-65 ~ +200	

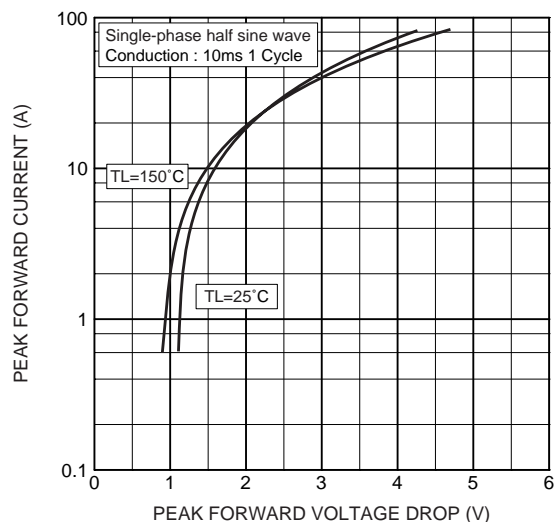
Notes (1) Lead mounting : Lead temperature 300°C max. to 3.2mm from body for 5sec. max..
 (2) Mechanical strength : Bending 90°×2 cycles or 180°×1 cycle, Tensile 3kg, Twist 90°×1 cycle.

CHARACTERISTICS(T_L=25°C)

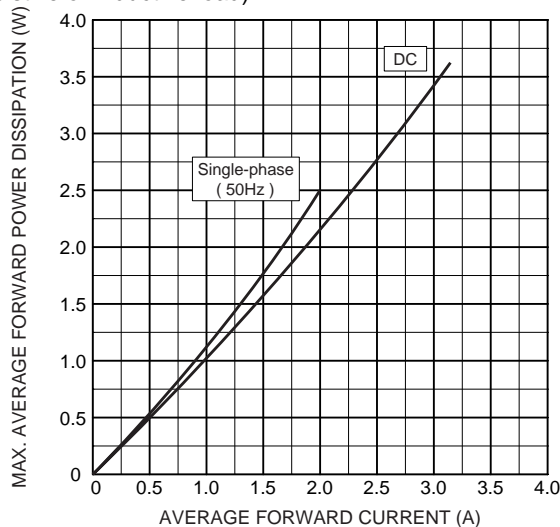
Items	Symbols	Units	Min.	Typ.	Max.	Test Conditions	
Peak Reverse Current	I _{RRM}	μA	—	4.0	60	C class	Rated V _{RRM}
				2.0	10	E,G class	
Peak Forward Voltage	V _{FM}	V	—	—	1.2	I _{FM} =2.0 Ap, Single-phase half sine wave 1 cycle	
Reverse Recovery Time	trr	μs	—	—	0.4	I _F =2mA, V _R =-15V	
Steady State Thermal Impedance	R _{th(j-a)}	°C/W	—	—	60	Lead length = 10 mm	
	R _{th(j-l)}				30		

U06

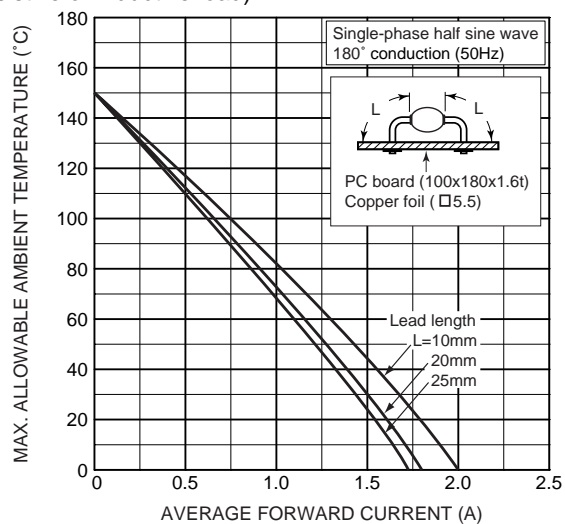
Forward characteristics



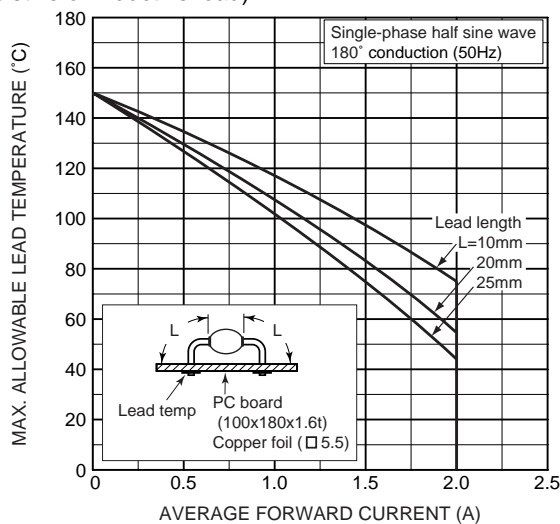
Max. average forward power dissipation (Resistive or inductive load)



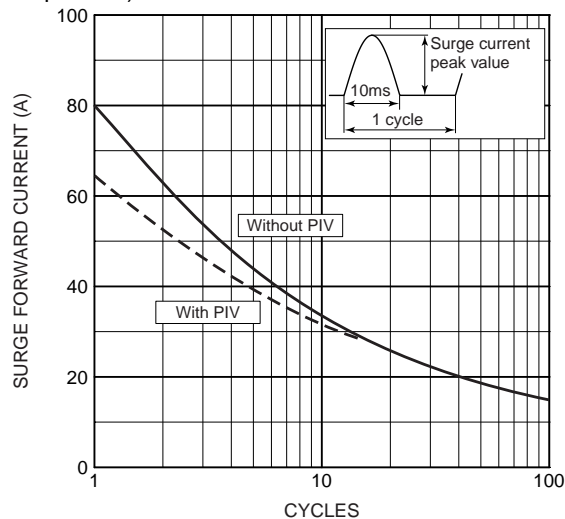
Max. allowable ambient temperature (Resistive or inductive load)



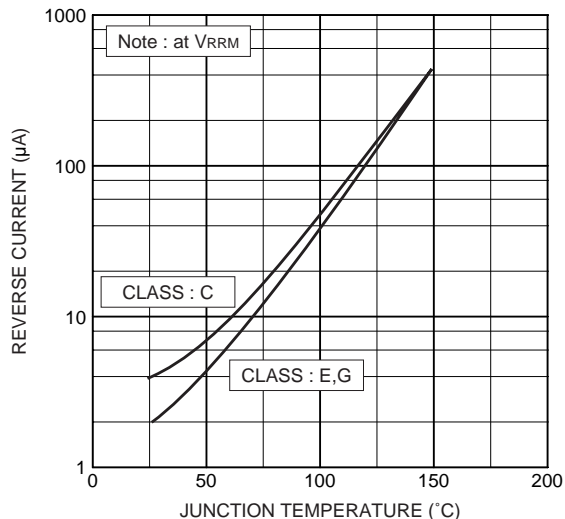
Max. allowable lead temperature (Resistive or inductive load)



Surge forward current characteristic (Non-repetitive)

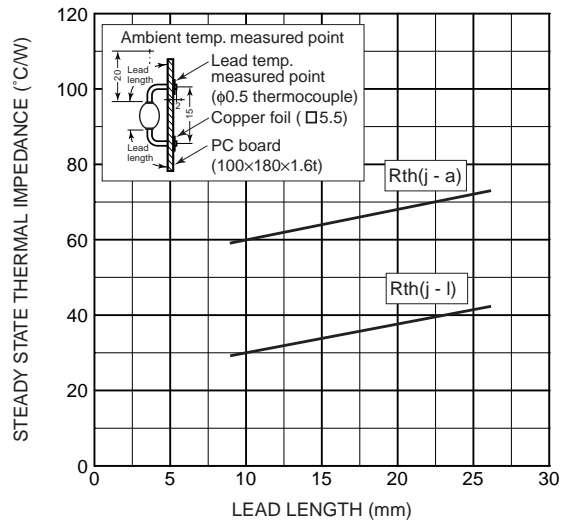


Typ. reverse current vs. junction temperature

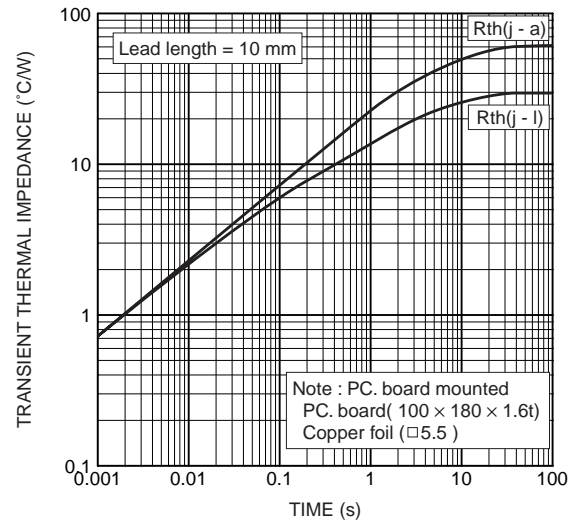


U06

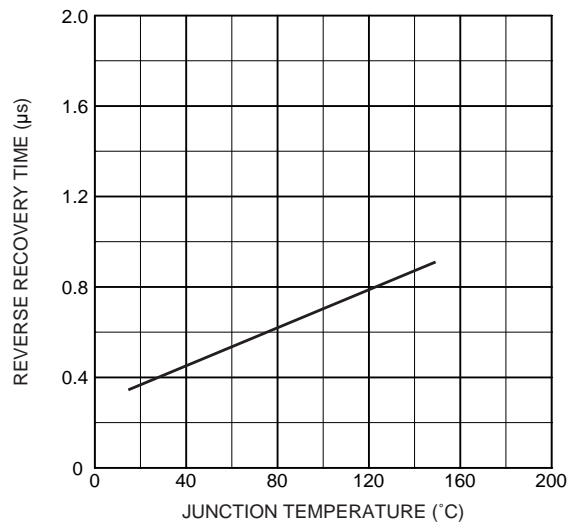
Steady state thermal impedance



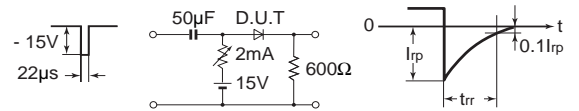
Transient thermal impedance



Typ. reverse recovery time vs. junction temperature



Reverse recovery time(t_{rr}) test circuit



HITACHI POWER SEMICONDUCTORS

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