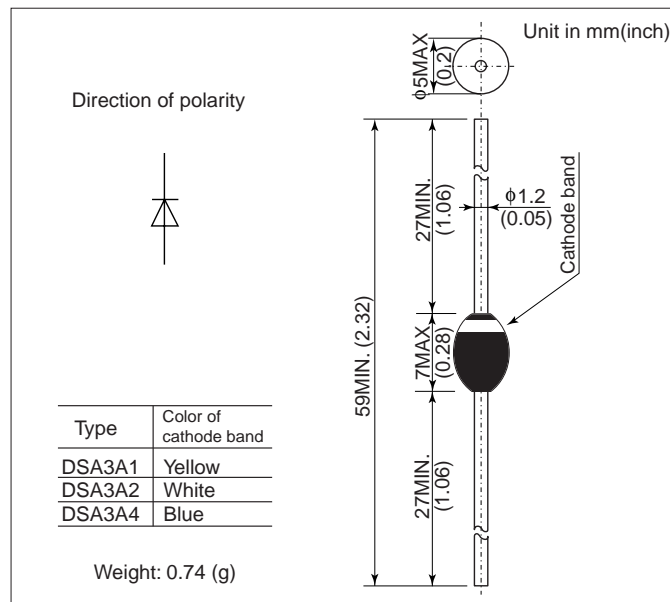


# DSA3A

## FEATURES

- For general purpose.
- Diffused-junction. Resin encapsulated.

## OUTLINE DRAWING



## ABSOLUTE MAXIMUM RATINGS

Items	Type	DSA3A1	DSA3A2	DSA3A4
Repetitive Peak Reverse Voltage	$V_{RRM}$	V	100	200
Average Forward Current	$I_{F(AV)}$	A	3.0 (Single-phase half sine wave 180° conduction TL = 90°C, Lead length = 10mm)	
Surge(Non-Repetitive) Forward Current	$I_{FSM}$	A	120 (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	57.6 (Time = 2 ~ 10ms, I = RMS value)	
Operating Junction Temperature	T <sub>j</sub>	°C	-40 ~ +150	
Storage Temperature	T <sub>stg</sub>	°C	-40 ~ +150	

Notes (1) Lead mounting : Lead temperature 280°C max. to 3.2mm from body for 5sec. max..

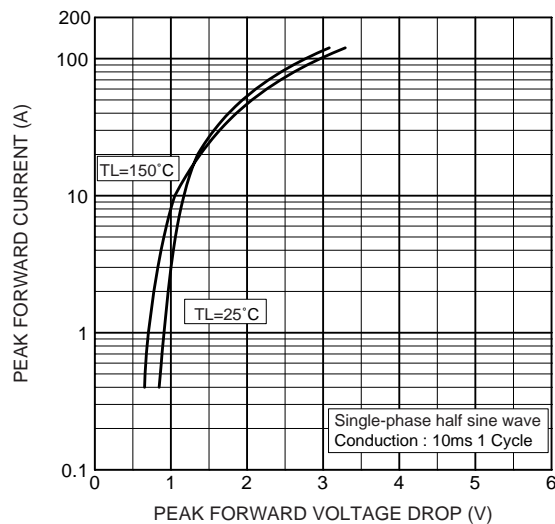
(2) Mechanical strength : Bending 90°×2 cycles or 180°×1 cycle, Tensile 3kg, Twist 90°×1 cycle.

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

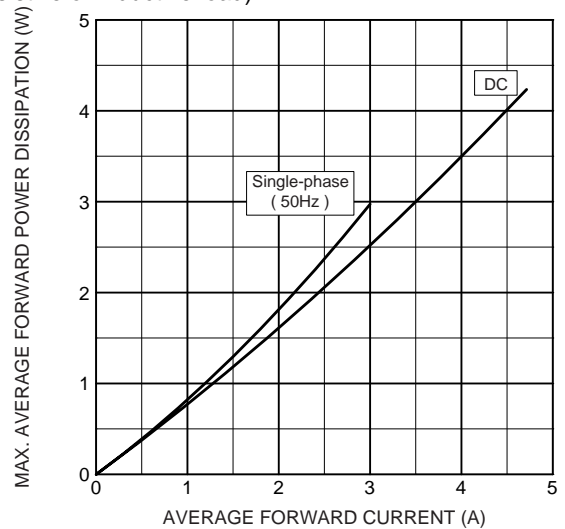
Items	Symbols	Units	Min.	Typ.	Max.	Test Conditions
Peak Reverse Current	$I_{RRM}$	$\mu\text{A}$	—	—	60	DSA3A1,2
					10	DSA3A 4
Peak Forward Voltage	$V_{FM}$	V	—	—	1.0	$I_{FM}=3.0\text{A}$ , Single-phase half sine wave 1 cycle
Steady State Thermal Impedance	$R_{th(j-a)}$	°C/W	—	—	50	Lead length = 10 mm
	$R_{th(j-l)}$				20	

# DSA3A

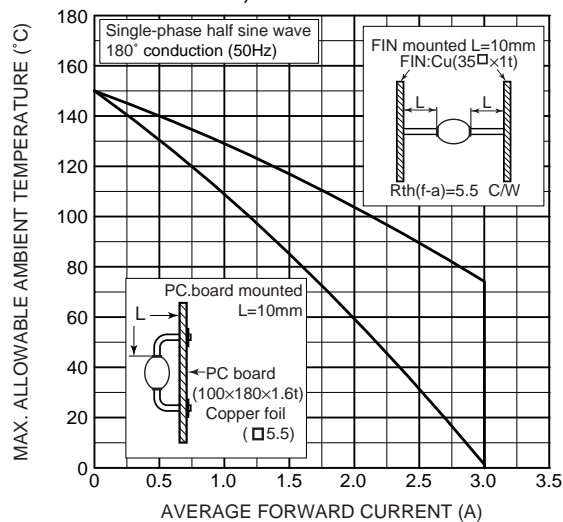
Forward characteristics



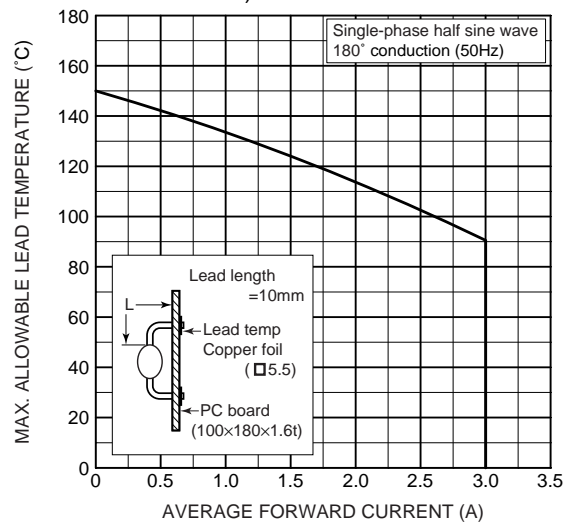
Max. average forward power dissipation  
(Resistive or inductive load)



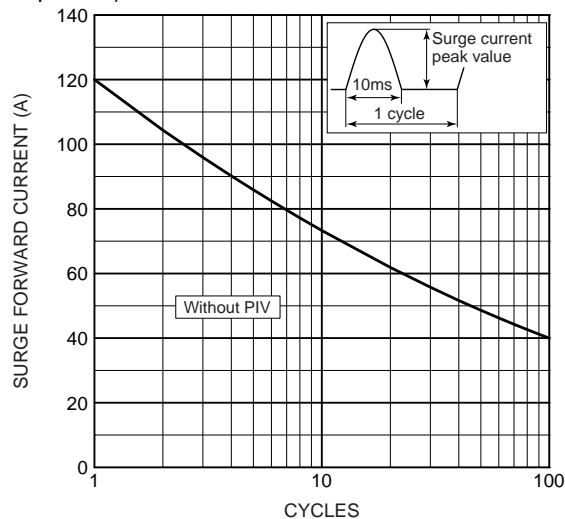
Max. allowable ambient temperature  
(Resistive or inductive load)



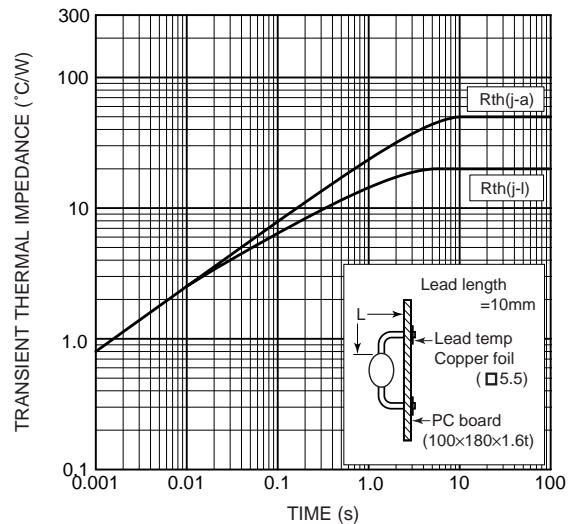
Max. allowable lead temperature  
(Resistive or inductive load)



Surge forward current characteristic  
(Non-repetitive)



Transient thermal impedance



# HITACHI POWER SEMICONDUCTORS

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