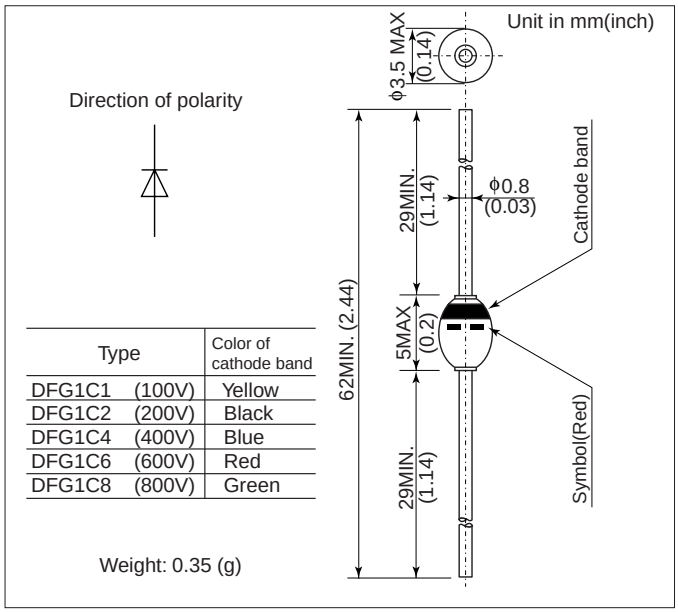
DFG1C

FEATURES

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

OUTLINE DRAWING



Type	Color of cathode band
DFG1C1 (100V)	Yellow
DFG1C2 (200V)	Black
DFG1C4 (400V)	Blue
DFG1C6 (600V)	Red
DFG1C8 (800V)	Green

ABSOLUTE MAXIMUM RATINGS

Items	Type		DFG1C1	DFG1C2	DFG1C4	DFG1C6	DFG1C8
Repetitive Peak Reverse Voltage	V_{RRM}	V	100	200	400	600	800
Average Forward Current	$I_{F(AV)}$	A	1.0(TL=80°C)			1.0(TL=70°C)	
			(Single-phase half sine wave 180° conduction, Lead length = 10mm)				
Surge(Non-Repetitive) Forward Current	I_{FSM}	A	35			30	
			(Without PIV, 10ms conduction, Tj = 150°C start)				
I^2t Limit Value	I^2t	A^2s	4.9			3.6	
			(Time = 2 ~ 10ms, I = RMS value)				
Operating Junction Temperature	T_j	°C	-65 ~ +150				
Storage Temperature	T_{stg}	°C	-65 ~ +150				

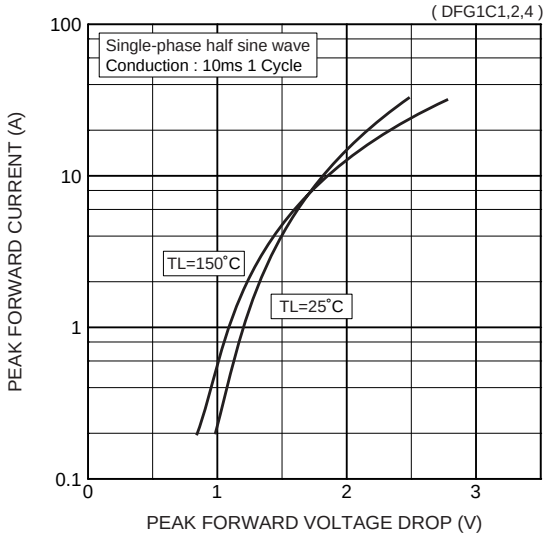
Notes (1) Lead mounting : Lead temperature 300°C max. to 3.2mm from body for 5sec. max..
(2) Mechanical strength : Bending 90°×2 cycles or 180°×1 cycle, Tensile 2kg, Twist 90°×1 cycle.

CHARACTERISTICS(T_L=25°C)

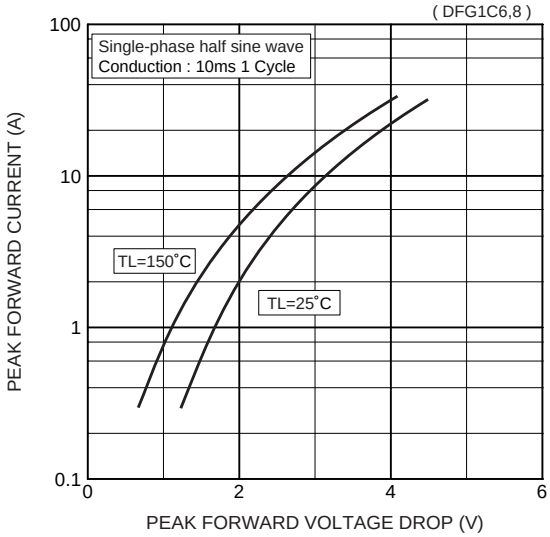
Items	Symbols	Units	Min.	Typ.	Max.	Test Conditions	
Peak Reverse Current	I_{RRM}	μA	—	—	10	Rated V_{RRM}	
Peak Forward Voltage	V_{FM}	V	—	—	1.2	DFG1C1,2,4	I_{FM}=1.0Ap, Single-phase half sine wave 1 cycle
			—	—	1.6	DFG1C6,8	
Reverse Recovery Time	trr	μs	—	—	0.1	I_F=0.5A, I_{rp}=1.0A, 25% Recovery	
Steady State Thermal Impedance	$R_{th(j-a)}$	°C/W	—	—	80	Lead length = 10 mm	
	$R_{th(j-l)}$				50		

DFG1C

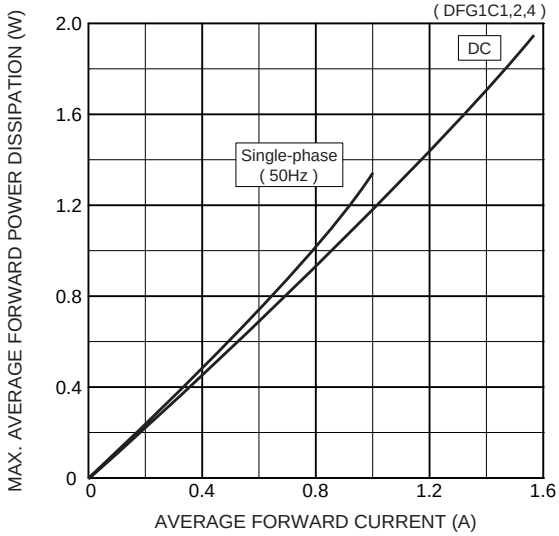
Forward characteristics



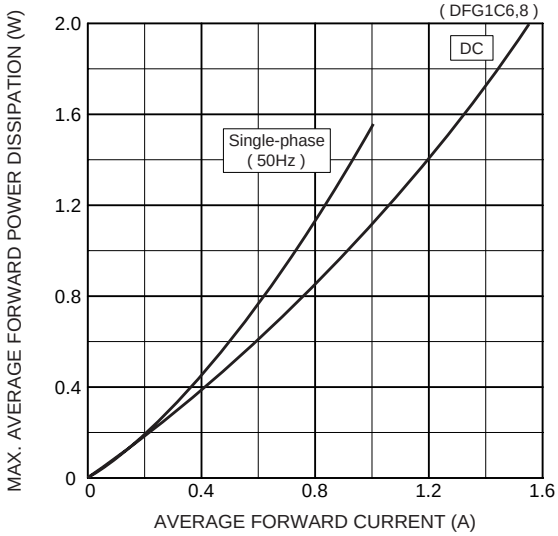
Forward characteristics



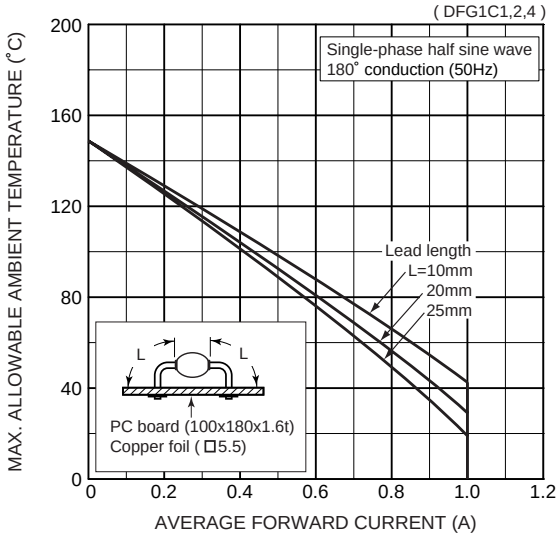
Max. average forward power dissipation
(Resistive or inductive load)



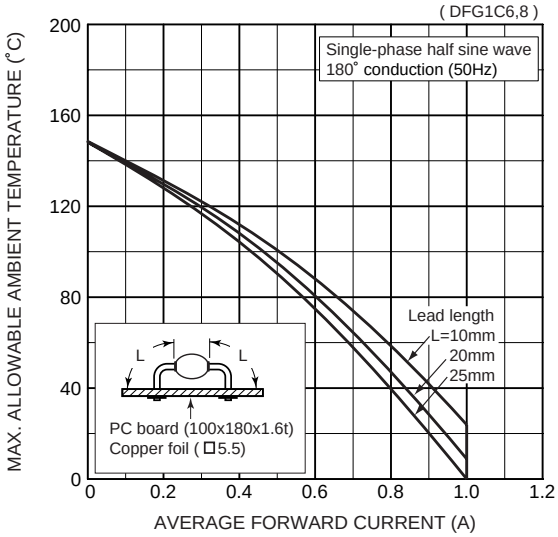
Max. average forward power dissipation
(Resistive or inductive load)



Max. allowable ambient temperature
(Resistive or inductive load)



Max. allowable ambient temperature
(Resistive or inductive load)



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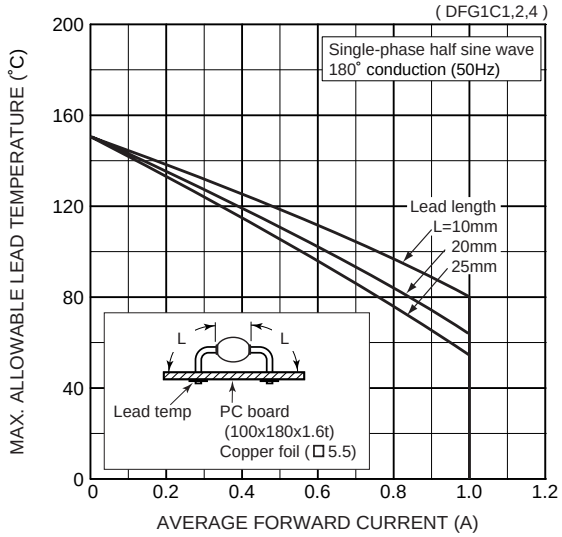
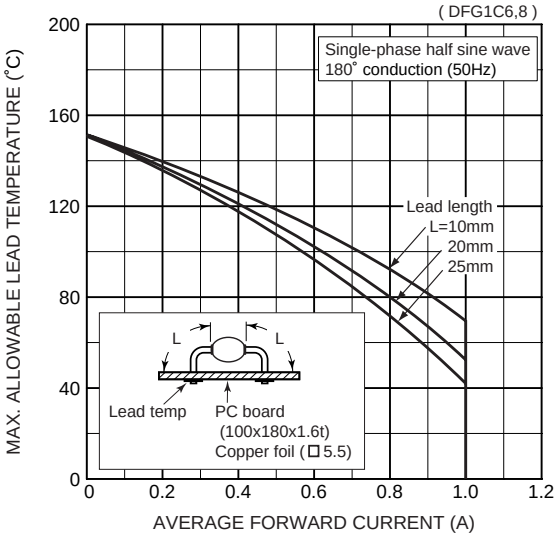
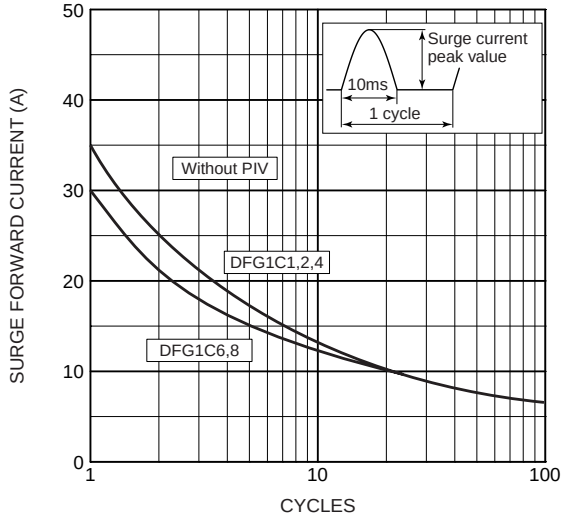
Max. allowable lead temperature
(Resistive or inductive load)



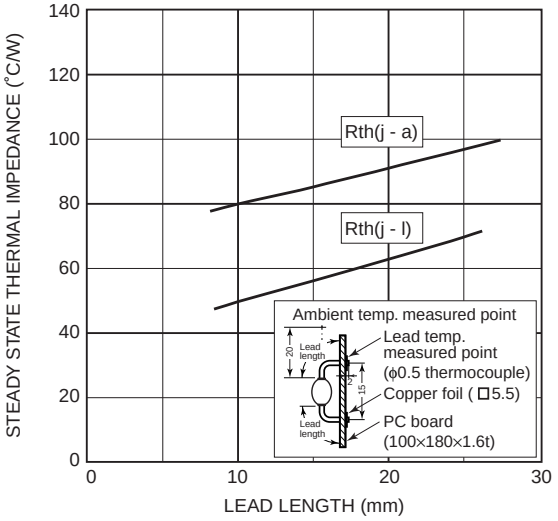
Max. allowable lead temperature
(Resistive or inductive load)



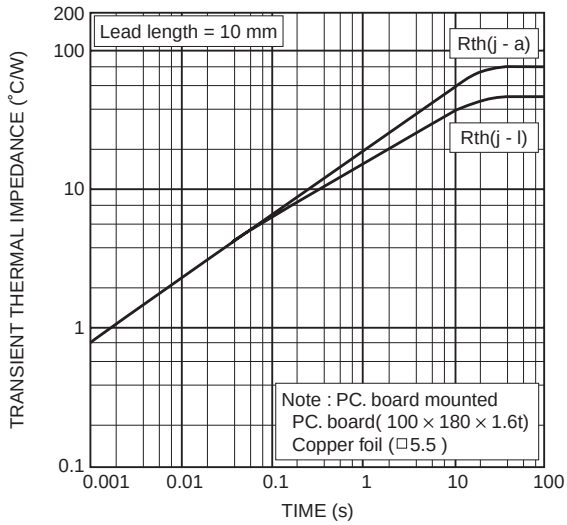
Surge forward current characteristic
(Non-repetitive)



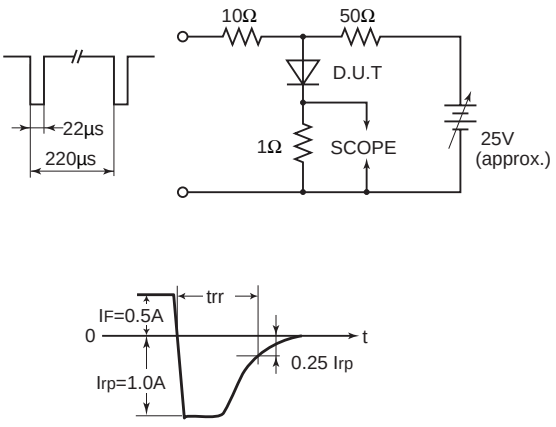
Steady state thermal impedance



Transient thermal impedance



Reverse recovery time (trr) test circuit



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