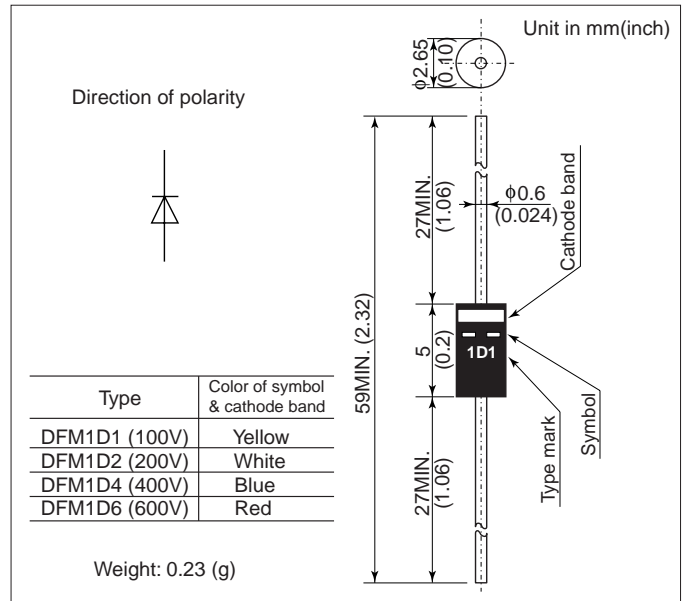


DFM1D

FEATURES

- For high speed switching.
- Diffused-junction. Resin encapsulated.

OUTLINE DRAWING



ABSOLUTE MAXIMUM RATINGS

Items	Type	DFM1D1	DFM1D2	DFM1D4	DFM1D6
Repetitive Peak Reverse Voltage	V_{RRM} V	100	200	400	600
Average Forward Current	$I_{F(AV)}$ A	1.0 (Single-phase half sine wave 180° conduction TL = 57°C, Lead length = 6mm)			
Surge(Non-Repetitive) Forward Current	I_{FSM} A	40 (Without PIV, 10ms conduction, Tj = 40°C start)			
I ² t Limit Value	I ² t A ² s	6.4 (Time = 2 ~ 10ms, I = RMS value)			
Operating Junction Temperature	T _j °C	-40 ~ +150			
Storage Temperature	T _{stg} °C	-40 ~ +150			

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

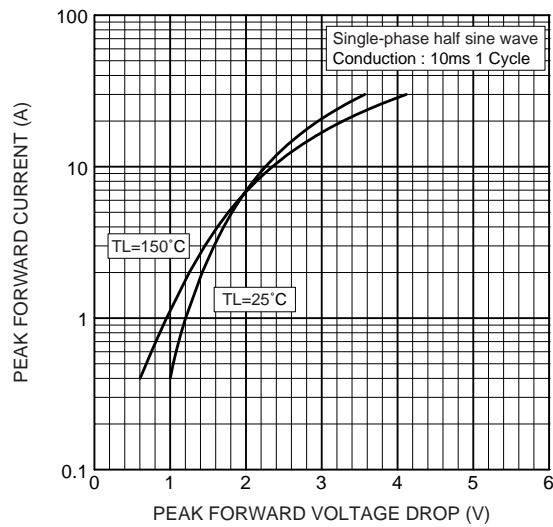
(2) Mechanical strength : Bending 90°×2 cycles or 180°×1 cycle, Tensile 2kg, Twist 90°×1 cycle.

CHARACTERISTICS(T_L=25°C)

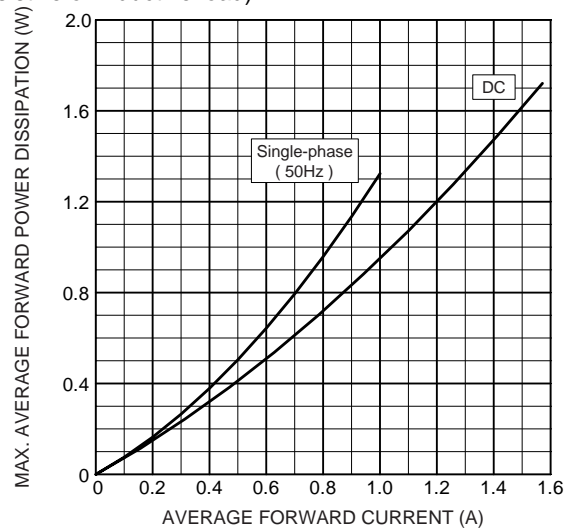
Items	Symbols	Units	Min.	Typ.	Max.	Test Conditions
Peak Reverse Current	I_{RRM}	μA	—	—	20 10	DFM1D1,2 DFM1D4,6 Rated V_{RRM}
Peak Forward Voltage	V_{FM}	V	—	—	1.2	$I_{FM}=1.0A$, Single-phase half sine wave 1 cycle
Reverse Recovery Time	t_{rr}	μs	—	—	0.2	$I_F=0.5A$, $I_{rp}=1.0A$, 25%recovery
Steady State Thermal Impedance	$R_{th(j-a)}$ $R_{th(j-l)}$	°C/W	—	—	100 70	Lead length = 6 mm

DFM1D

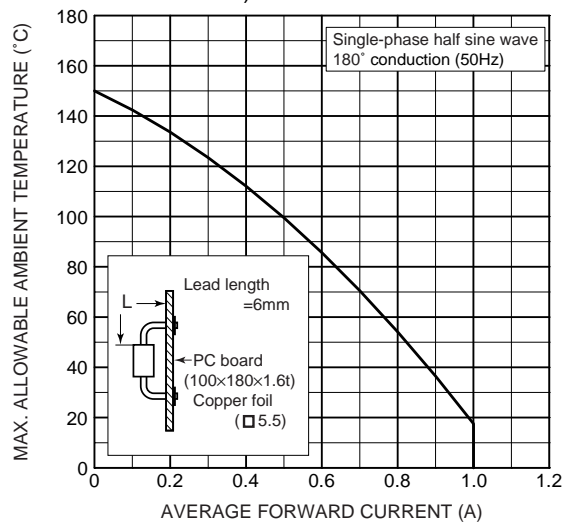
Forward characteristics



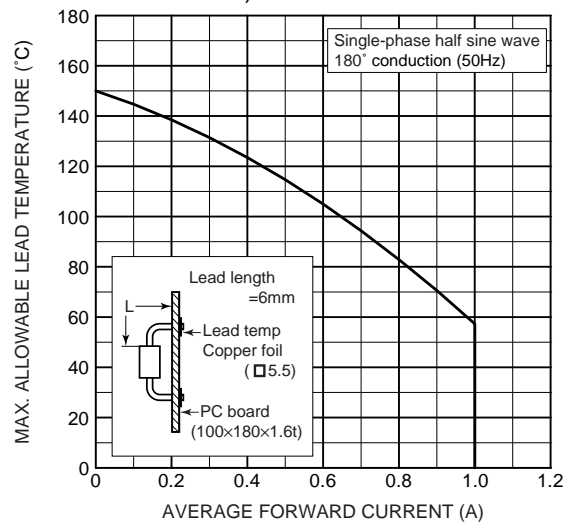
Max. average forward power dissipation
(Resistive or inductive load)



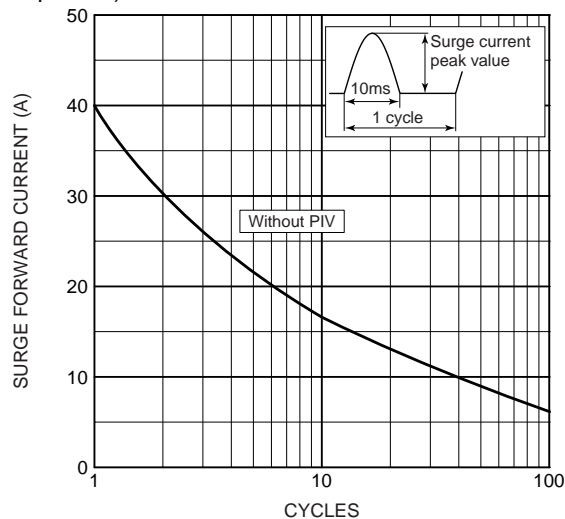
Max. allowable ambient temperature
(Resistive or inductive load)



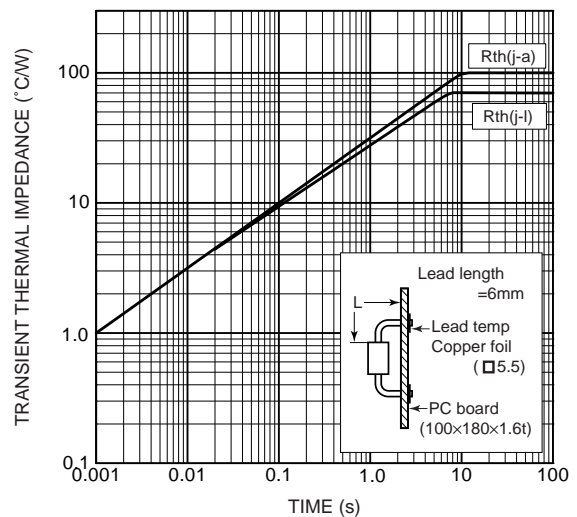
Max. allowable lead temperature
(Resistive or inductive load)



Surge forward current characteristic
(Non-repetitive)

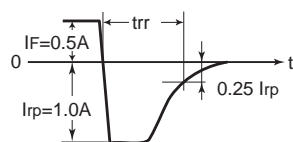
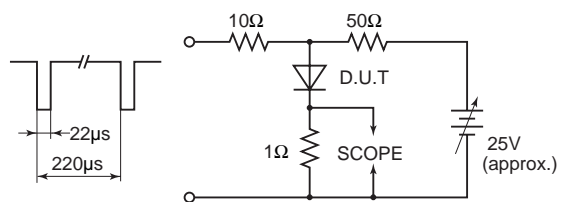


Transient thermal impedance



DFM1D

Reverse recovery time(t_{rr}) test circuit



HITACHI POWER SEMICONDUCTORS

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