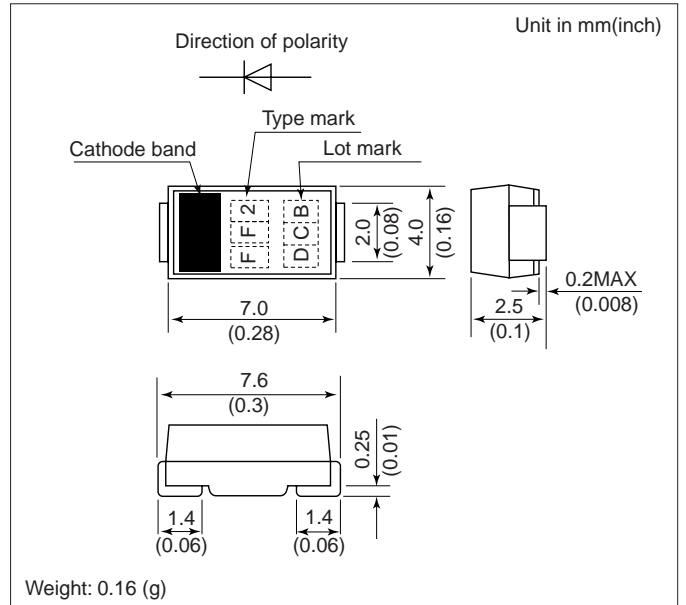


DFM3MF

FEATURES

- For high speed switching
- Soft recovery, low noise.
- Low loss, high efficiency.

OUTLINE DRAWING



ABSOLUTE MAXIMUM RATINGS

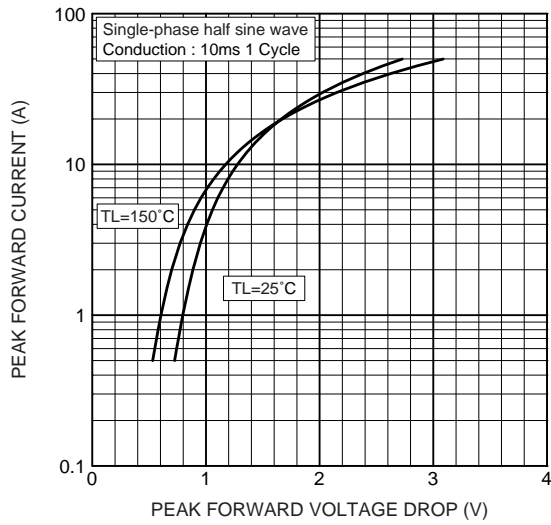
Item	Type		DFM3MF2
Repetitive Peak Reverse Voltage	V_{RRM}	V	200
Average Forward Current	$I_{F(AV)}$	A	3.0 (Single-phase half sine wave 180° conduction) ($T_L = 98^\circ\text{C}$)
Surge(Non-Repetitive) Forward Current	I_{FSM}	A	50 (Without PIV, 10ms conduction, $T_j = 40^\circ\text{C}$ start)
Operating Junction Temperature	T_j	$^\circ\text{C}$	-40 ~ +150
Storage Temperature	T_{stg}	$^\circ\text{C}$	-40 ~ +150

CHARACTERISTICS($T_L = 25^\circ\text{C}$)

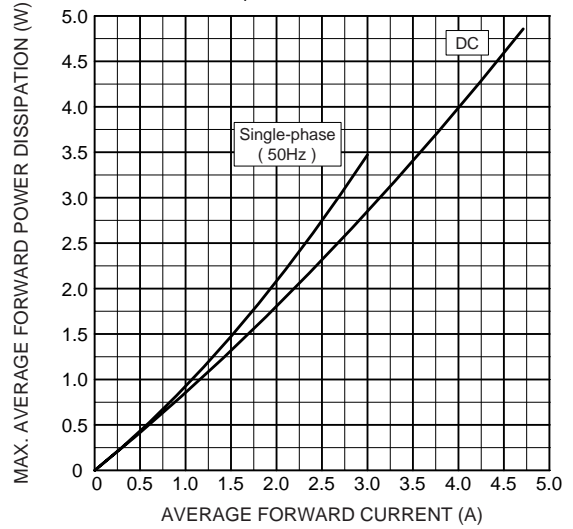
Item	Symbols	Units	Min.	Typ.	Max.	Test Conditions
Peak Reverse Current	I_{RRM}	μA	—	—	10	$V_R = V_{RRM}$
Peak Forward Voltage	V_{FM}	V	—	—	0.95	$I_{FM} = 3.0\text{A}_p$, Single-phase half sine wave 1 cycle
Reverse Recovery Time	T_{rr}	ns	—	—	35	$I_F = 0.5\text{A}$, $I_{rp} = 1.0\text{A}$, 25% recovery
Steady State Thermal Impedance	$R_{th(j-a)}$	$^\circ\text{C/W}$	—	—	90	On glass-epoxi substrate (\square 50mm) Soldering land(\square 10mm)
	$R_{th(j-l)}$				15	

DFM3MF

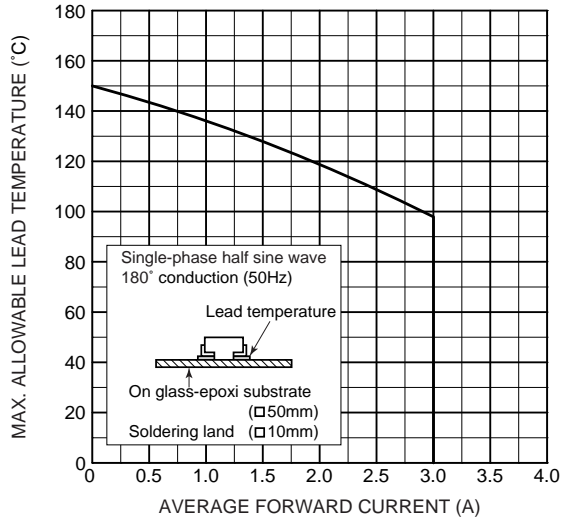
Forward characteristics



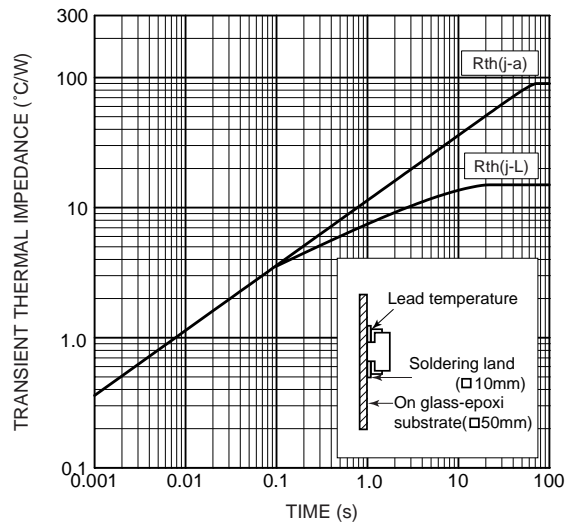
Max. average forward power dissipation (Resistive or inductive load)



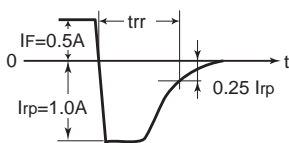
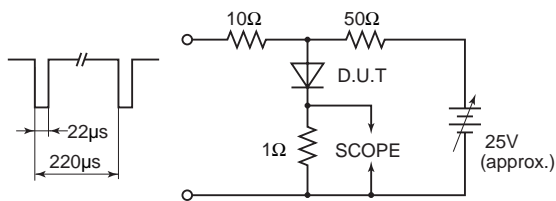
Max. allowable lead temperature (Resistive or inductive load)



Transient thermal impedance



Reverse recovery time(trr) test circuit



HITACHI POWER SEMICONDUCTORS

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