

**DLM10**

Silicon Diffused Junction Type

1.0A Ultrahigh-Speed Rectifier**Applications**

- Switching regulator, high-frequency rectification.

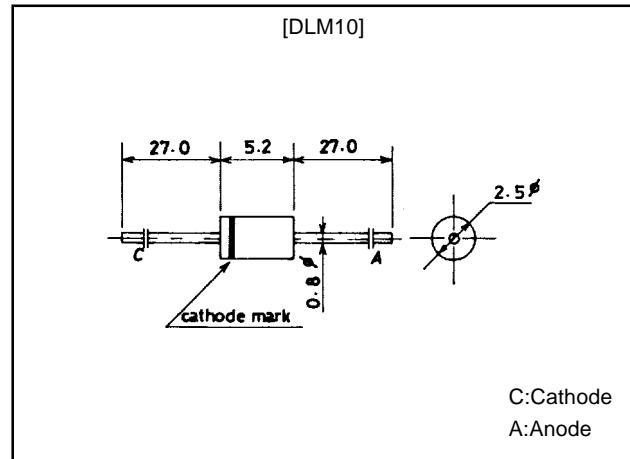
Features

- Fast reverse recovery time and small switching loss.
- Reverse voltage : $V_{RM}=100$ to 400V.
- Average rectified current : $I_O=1.0A$.

Package Dimensions

unit:mm

1190

**Specifications****Absolute Maximum Ratings at $T_a = 25^\circ C$**

Parameter	Symbol	Conditions	DLM10B	DLM10C	DLM10E	Unit
Peak Reverse Voltage	V_{RM}		100	200	400	V
Average Rectified Current	I_O	50Hz, resistive load, no fin, $T_a=57^\circ C$ resistive load ($L=8mm$, print land $10\times10mm$)	→	→	1.0	A
Surge Forward Current	I_{FSM}	50Hz sine wave, 1cycle	→	→	30	A
Junction Temperature	T_j		→	→	150	$^\circ C$
Storage Temperature	T_{stg}		→	→	-40 to +150	$^\circ C$

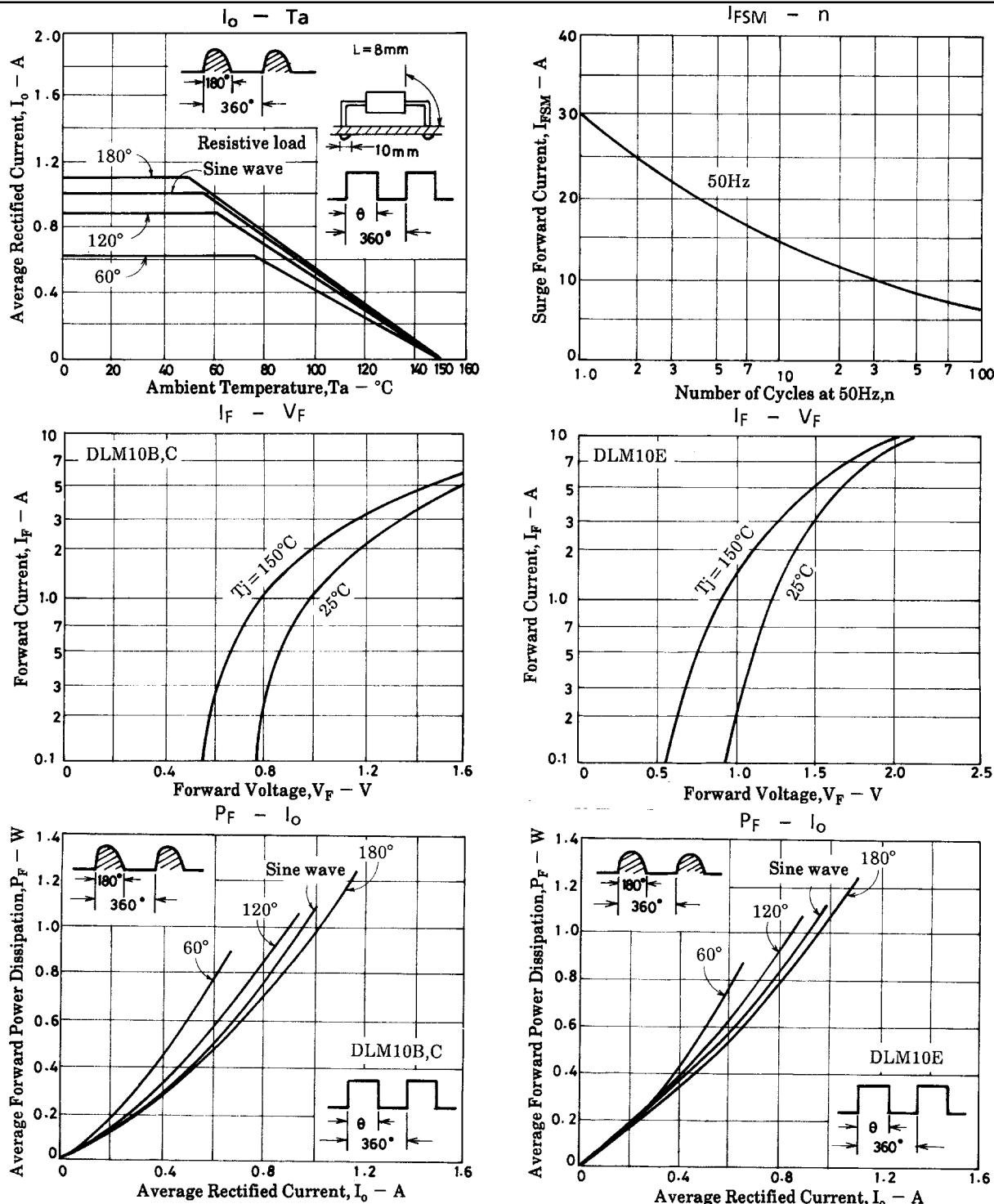
Electrical Characteristics [DLM10B, C] at $T_a = 25^\circ C$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Forward Voltage	V_F	$I_F=1.0A$			0.98	V
Reverse Current	I_R	V_R :Each V_{RM}			10	μA
Reverse Recovery Time	t_{rr}	$I_{FM}=1A$, $-di/dt=50A/\mu s$			35	ns
Thermal Resistance (Junction-Ambient)	$R_{th(j-a)}$	No heat sink, DLM10 only			115	$^\circ C/W$

Electrical Characteristics [DLM10E] at $T_a = 25^\circ C$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Forward Voltage	V_F	$I_F=1.0A$			1.25	V
Reverse Current	I_R	$V_R=400V$			20	μA
Reverse Recovery Time	t_{rr}	$I_{FM}=1A$, $-di/dt=50A/\mu s$			30	ns
Thermal Resistance (Junction-Ambient)	$R_{th(j-a)}$	No heat sink, DLM10 only			115	$^\circ C/W$

DLM10



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