



SANYO Semiconductors

## DATA SHEET

# DLM10

 — Silicon Diffused Junction Type  

## 1.0A Ultrahigh-Speed Rectifier

### Applications

- Switching regulators, high-frequency rectification.

### Features

- Fast reverse recovery time and small switching loss.
- Reverse voltage :  $V_{RM}=200$  to  $400V$ .
- Average rectified current :  $I_O=1.0A$ .

### Specifications

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

Parameter	Symbol	Conditions	DLM10C	DLM10E	Unit
Peak Reverse Voltage	$V_{RM}$		200	400	V
Average Rectified Current	$I_O$	50Hz, resistive load, no fin, $T_a=57^\circ C$ resistive load (L=8mm, print land 10×10mm)	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 [DLM10C] 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	$I_R$	$V_{RM}=200V$			10	$\mu A$
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	$^\circ C / W$

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**SANYO Semiconductor Co., Ltd.**

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# DLM10

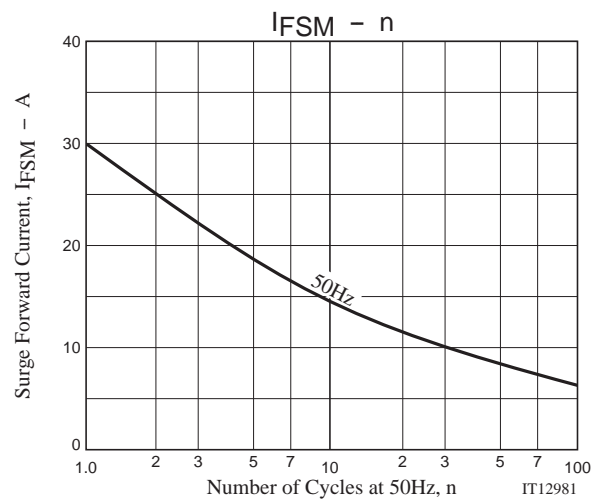
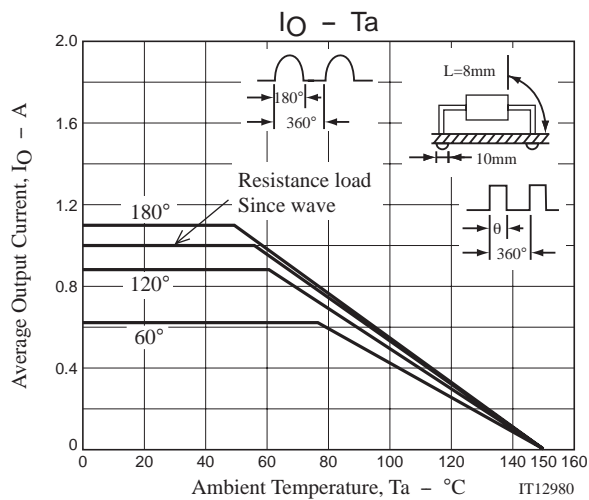
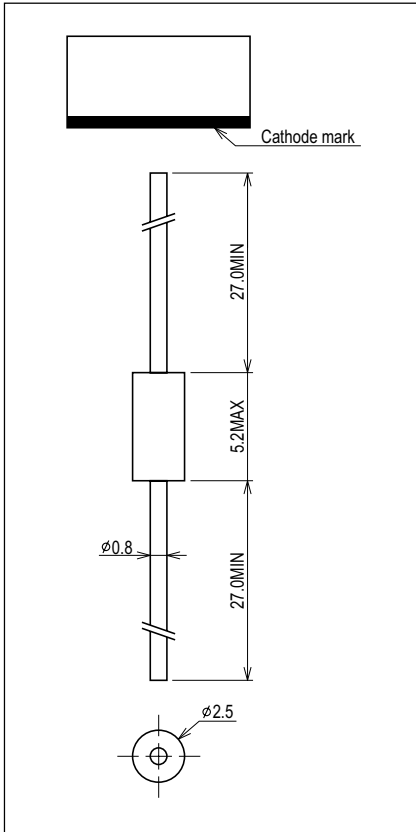
## Electrical Characteristics [DLM10E] at $T_a=25^\circ\text{C}$

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

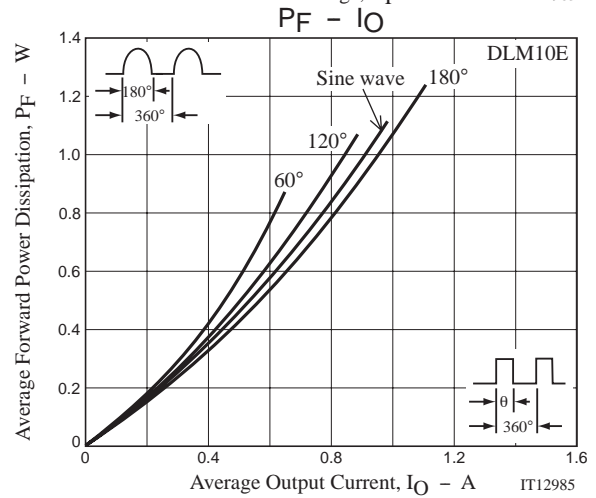
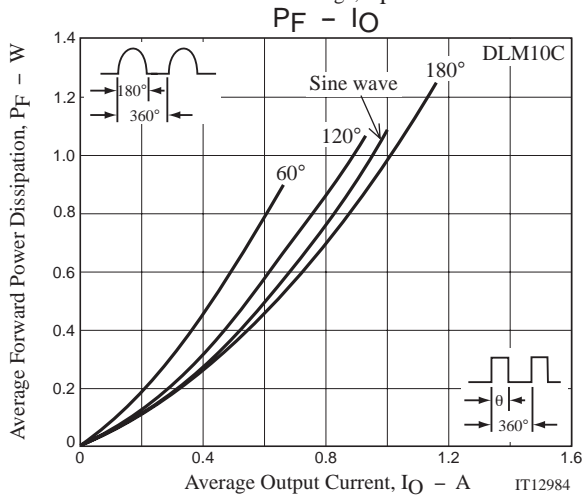
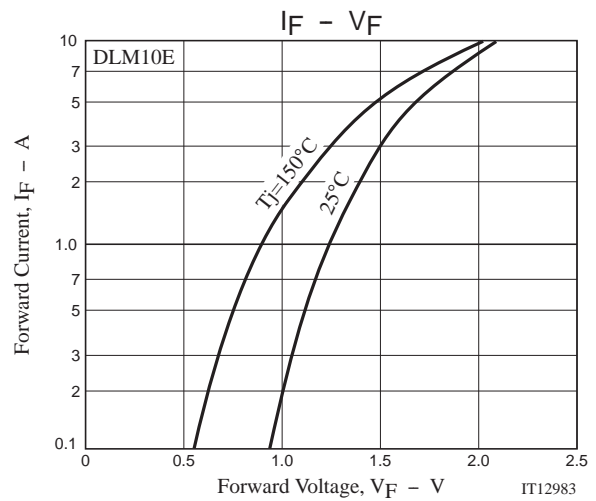
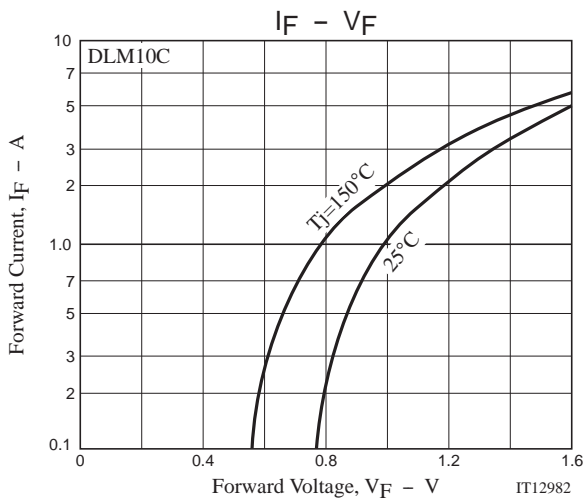
## Package Dimensions

unit : mm (typ)

7811-001



# DLM10



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