



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 $10 \times 10mm$ )	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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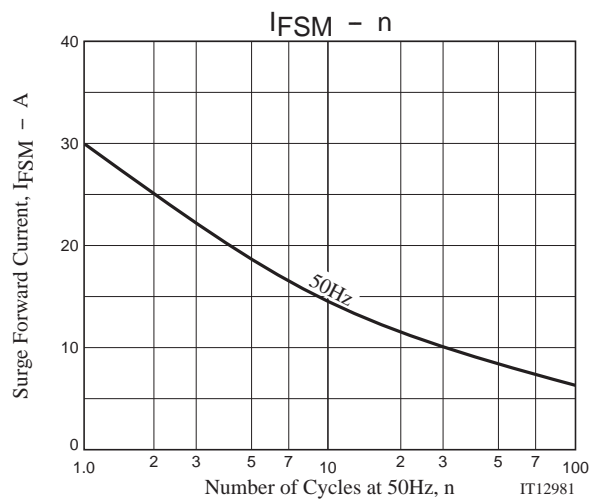
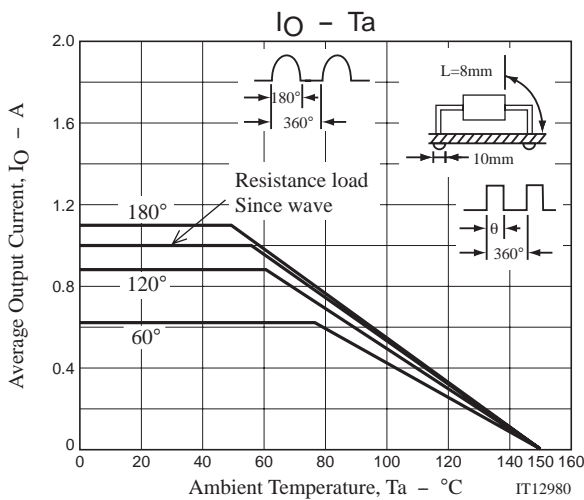
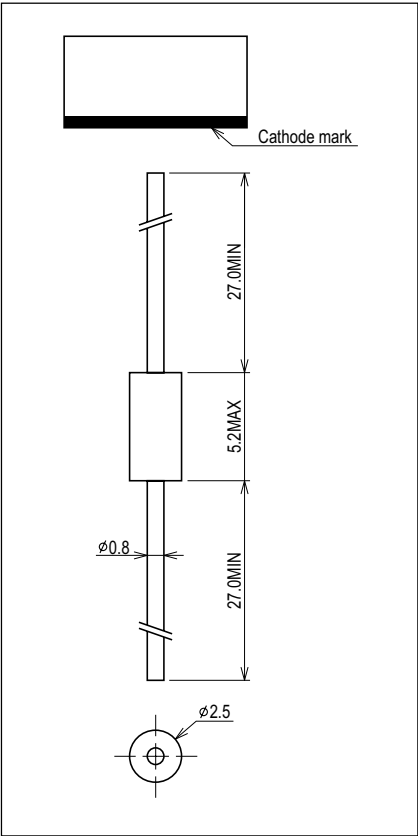
DLM10

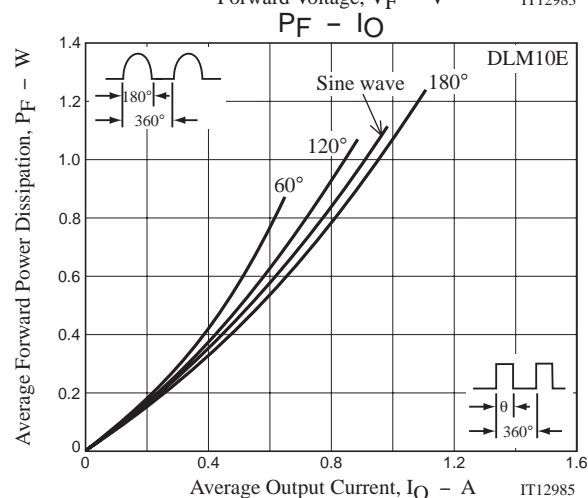
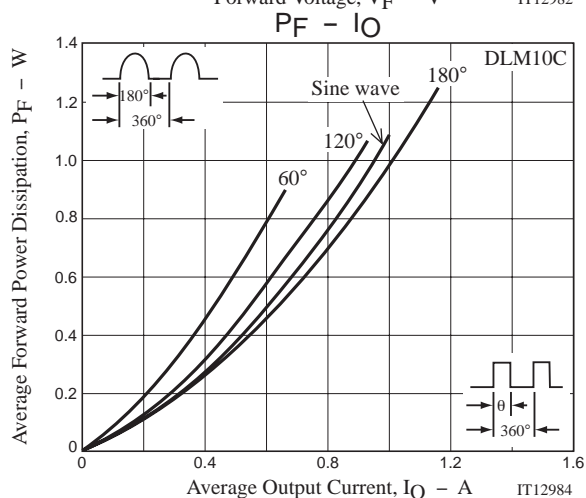
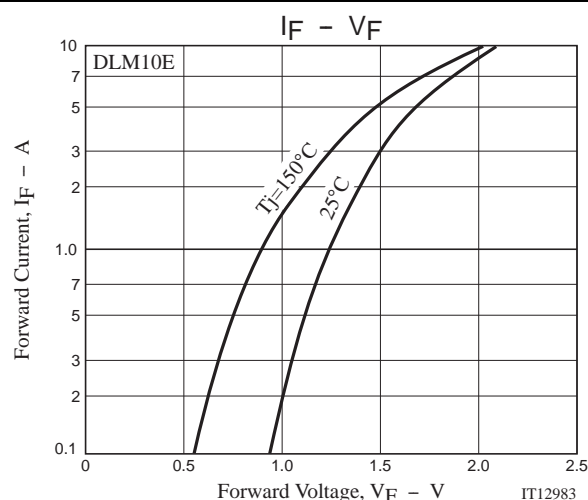
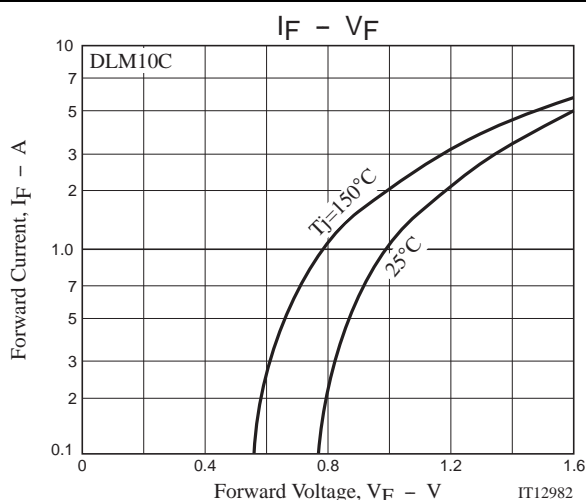
Electrical Characteristics [DLM10E] at Ta=25°C

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Forward Voltage	$V_F$	$I_F=1.0A$			1.25	V
Reverse Current	$I_R$	$V_{RM}=400V$			20	$\mu A$
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	$^{\circ}C / W$

Package Dimensions

unit : mm (typ)  
7811-001





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