



SANYO Semiconductors

DATA SHEET

SBE001

 — Schottky Barrier Diode

30V, 2A Rectifier

Applications

- High frequency rectification (switching regulators, converters and choppers).

Features

- Low forward voltage (V_F max=0.55V).
- Fast reverse recovery time (t_{rr} max=20ns).
- Low switching noise.
- Low leakage current and high reliability due to highly reliable planar structure.
- Ultrasmall-sized package, permitting SBE001-applied sets to be compact and slim (0.9mm).

Specifications

Absolute Maximum Ratings at $T_a=25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	VRRM		30	V
Nonrepetitive Peak Reverse Surge Voltage	VRSM		35	V
Average Output Current	I _O		2	A
Surge Forward Current	I _{FSM}	50Hz sine wave, 1 cycle	20	A
Junction Temperature	T _J		-55 to +125	°C
Storage Temperature	T _{stg}		-55 to +125	°C

Electrical Characteristics at $T_a=25^\circ\text{C}$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V _R	I _R =500μA	30			V
Forward Voltage	V _F	I _F =2A			0.55	V
Reverse Current	I _R	V _R =15V			100	μA
Interterminal Capacitance	C	V _R =10V, f=1MHz		70		pF
Reverse Recovery Time	t _{rr}	I _F =I _R =100mA, See specified Test Circuit.			20	ns
Thermal Resistance	R _{th(j-a)}	Mounted on a ceramic board (600mm ² X0.8mm)		110		°C / W

Marking : SA

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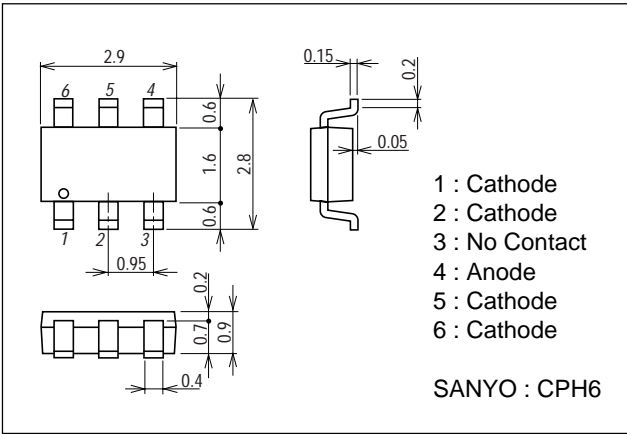
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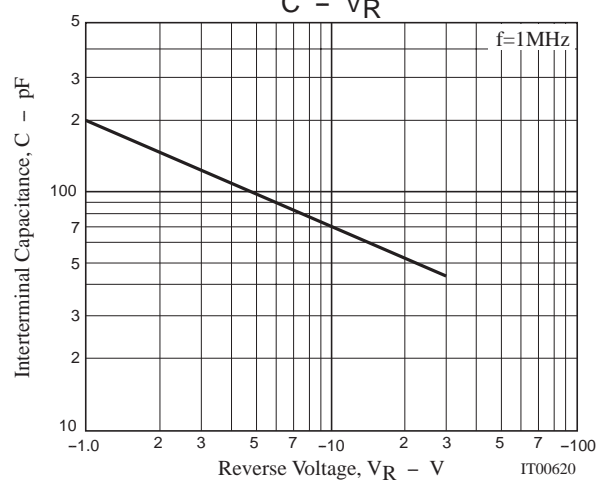
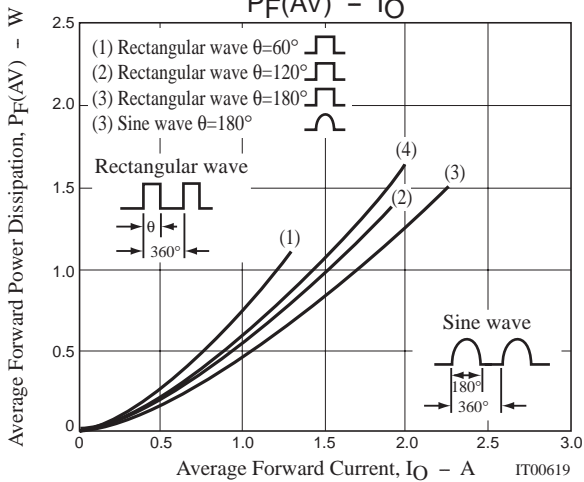
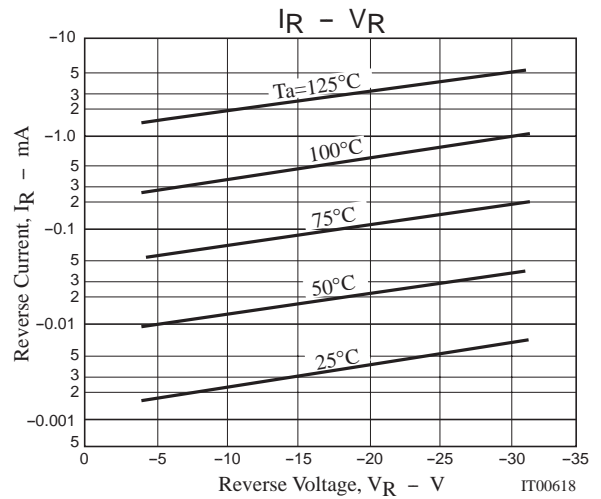
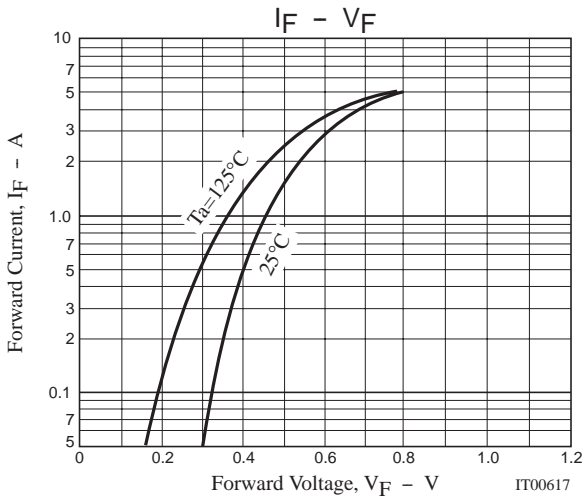
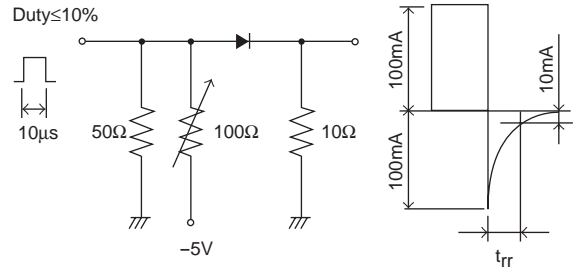
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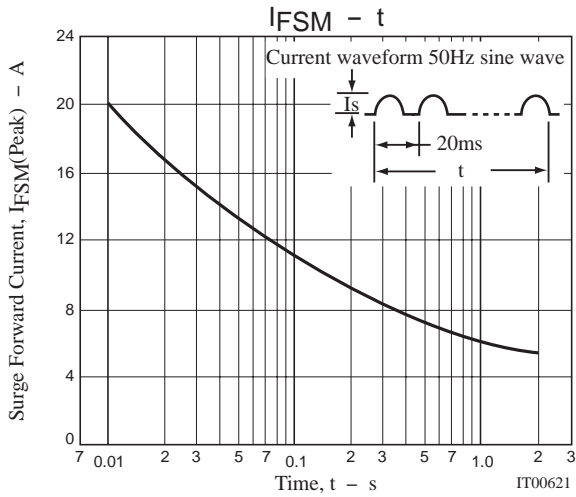
Package Dimensions

unit : mm
1295



t_{rr} Test Circuit





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