



SANYO Semiconductors

# DATA SHEET

## SBE807 — Schottky Barrier Diode 30V, 1.0A Rectifier

### Applications

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

### Features

- Low switching noise.
- Low reverse current ( $V_R=16V$ ,  $I_R \text{ max}=15\mu A$ ).

### Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$		30	V
Nonrepetitive Peak Reverse Surge Voltage	$V_{RSM}$		35	V
Average Output Current	$I_O$		1.0	A
Surge Forward Current	$I_{FSM}$	50Hz sine wave, 1 cycle	10	A
Junction Temperature	$T_J$		-55 to +125	$^\circ C$
Storage Temperature	$T_{stg}$		-55 to +125	$^\circ C$

#### Electrical Characteristics at $T_a=25^\circ C$

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	$V_R$	$I_R=0.2mA$	30			V
Forward Voltage	$V_{F1}$	$I_F=0.7A$		0.45	0.50	V
	$V_{F2}$	$I_F=1.0A$		0.48	0.53	V
Reverse Current	$I_R$	$V_R=16V$			15	$\mu A$
Interterminal Capacitance	C	$V_R=10V$ , $f=1MHz$		27		pF
Reverse Recovery Time	$t_{rr}$	$I_F=I_R=100mA$ , See specified Test Circuit.			10	ns
Thermal Resistance	$R_{th(j-a)}$	When mounted on ceramic substrate (900mm <sup>2</sup> ×0.8mm)		111		$^\circ C / W$

Marking : SJ

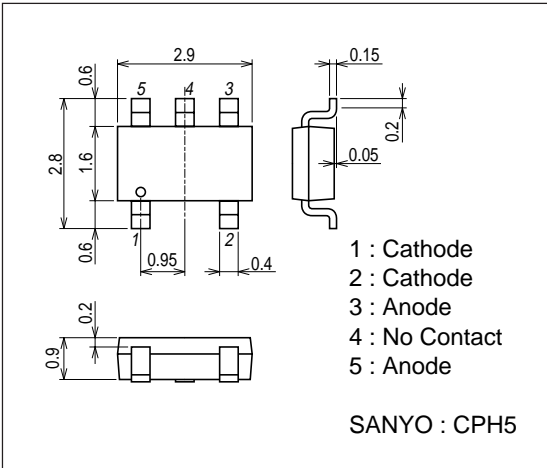
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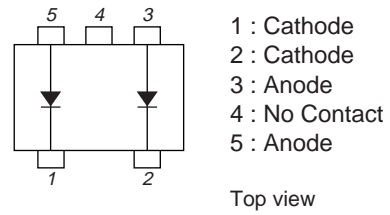
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**Package Dimensions**

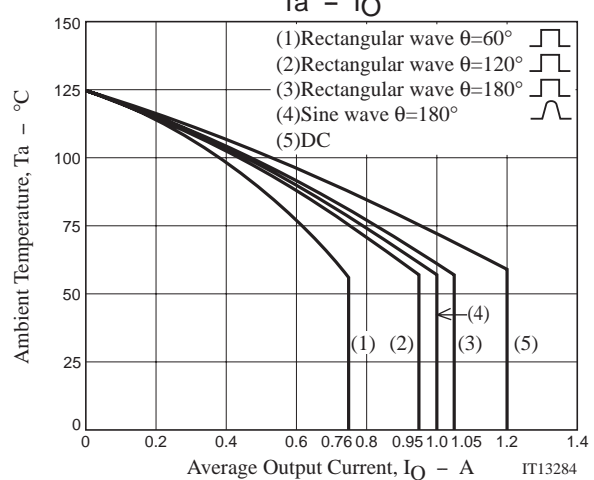
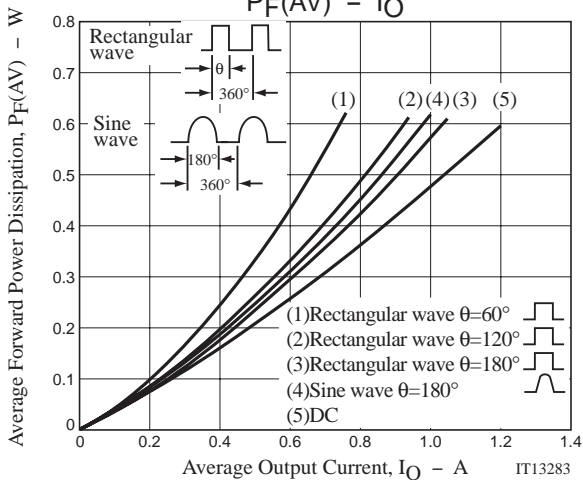
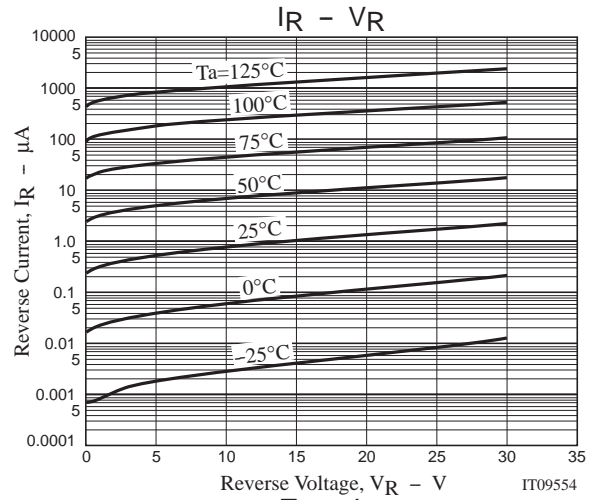
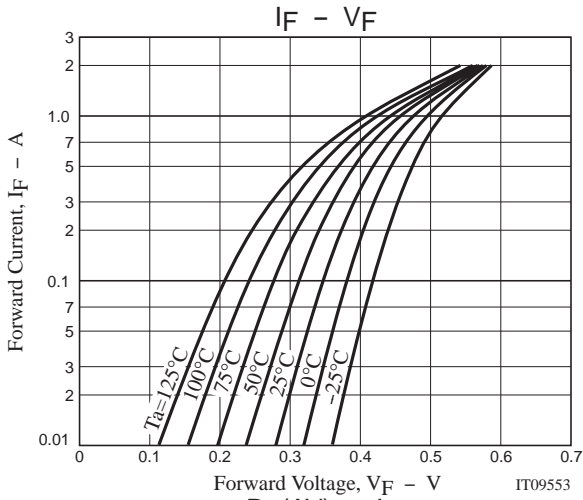
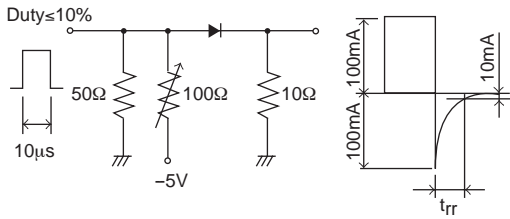
unit : mm (typ)  
7017A-001

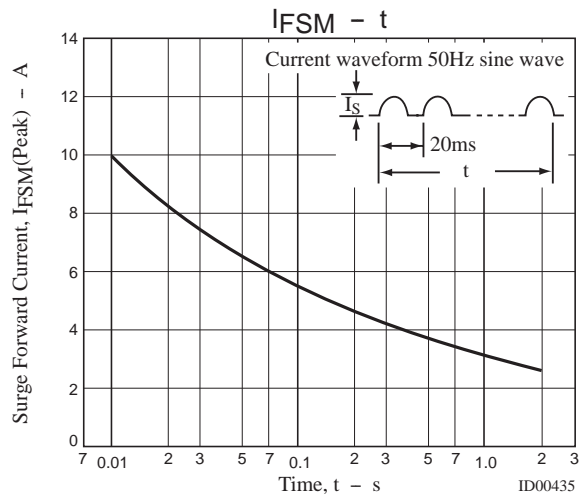
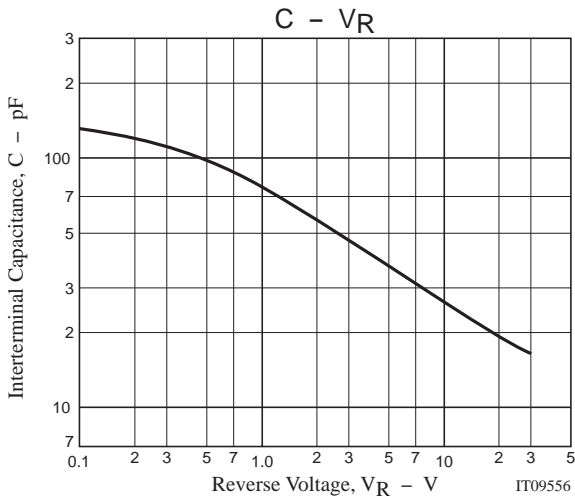


**Electrical Connection**



**t<sub>rr</sub> Test Circuit**





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