



SANYO Semiconductors

DATA SHEET

An ON Semiconductor Company

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	μA
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 ² ×0.8mm)		111		$^\circ C / W$

Marking : SJ

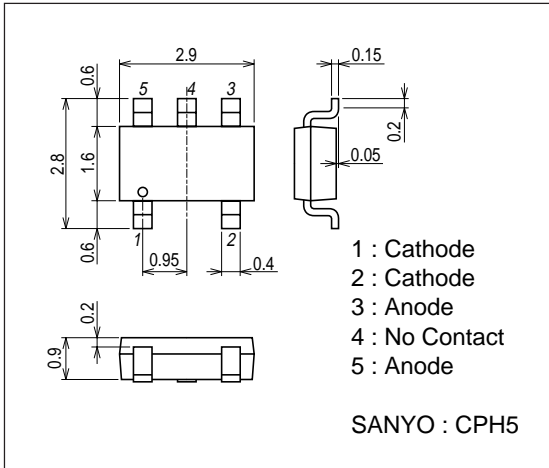
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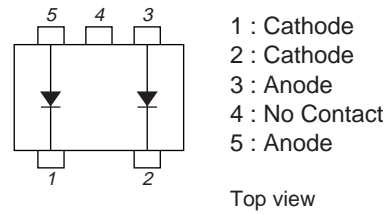
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Package Dimensions

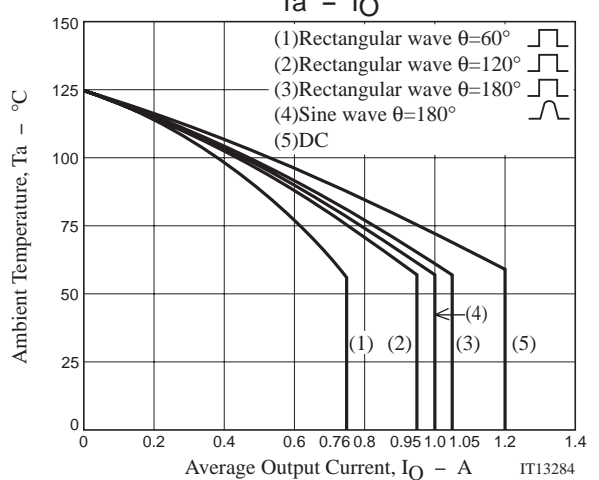
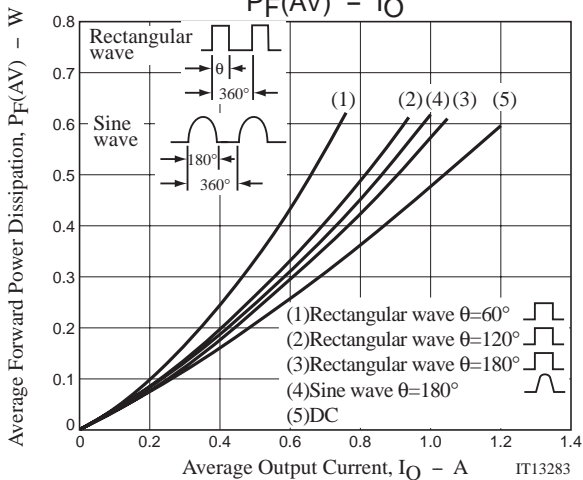
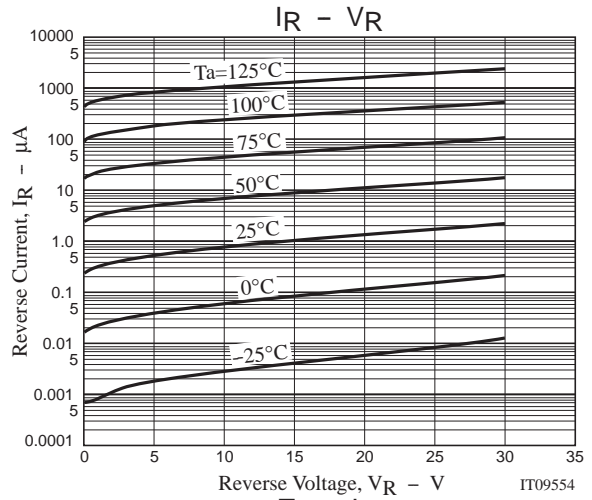
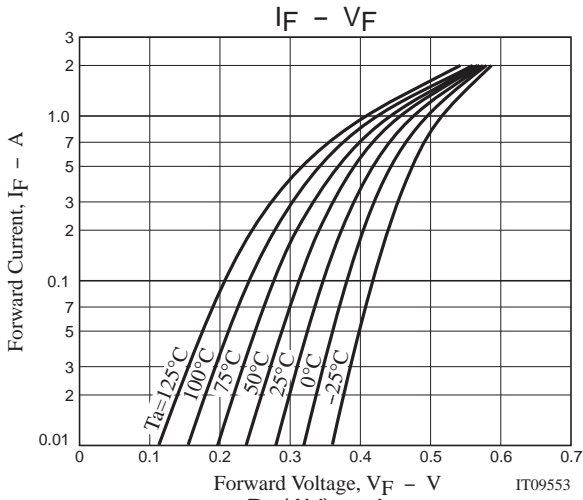
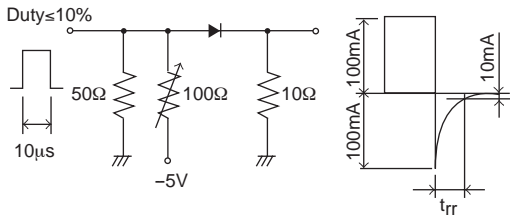
unit : mm (typ)
7017A-001

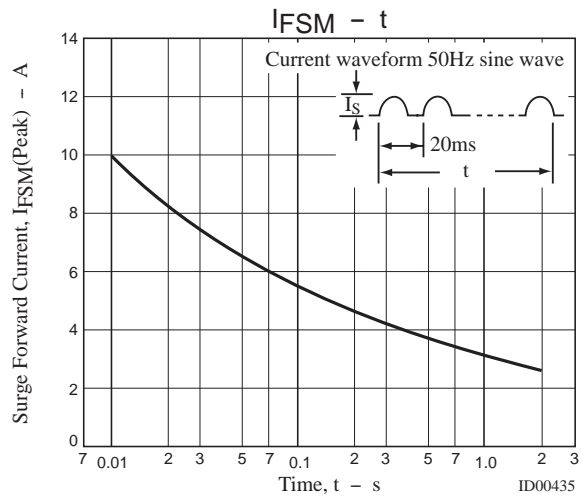
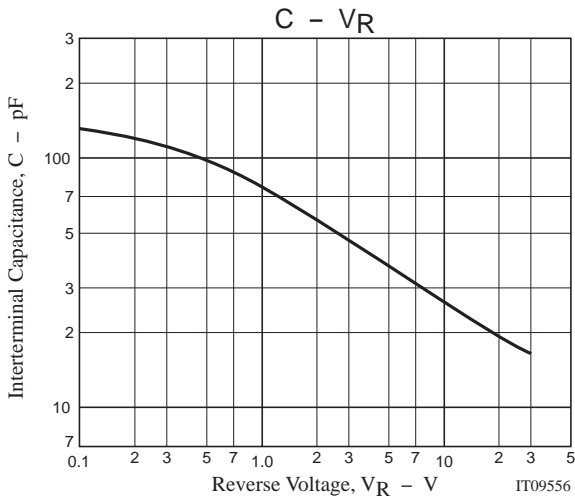


Electrical Connection



t_{rr} Test Circuit





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