



SANYO Semiconductors

DATA SHEET

SBE817

 — Low IR Schottky Barrier Diode

15V, 2.0A Rectifier

Applications

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

Features

- Composite type with 2 low IR SBDs in one package, facilitating high density mounting.
- Small switching noise.
- Low forward voltage ($I_F=2.0A$, $V_F \text{ max}=0.57V$).
- Low reverse current ($V_R=7.5V$, $I_R \text{ max}=6\mu A$).
- Ultrasmall package permitting applied sets to be small and slim (Mounting height 0.75mm).

Specifications

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

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	VRRM		15	V
Nonrepetitive Peak Reverse Surge Voltage	VRSM		17	V
Average Output Current	I_O		2.0	A
Surge Forward Current	IFSM	50Hz sine wave, 1 cycle	20	A
Junction Temperature	Tj		-55 to +125	°C
Storage Temperature	Tstg		-55 to +125	°C

Marking : SA

*: The absolute maximum ratings and electrical characteristics refer to those between Terminal 1 and Terminal 7 (or 8), and between Terminal 3 and Terminal 5 (or 6).

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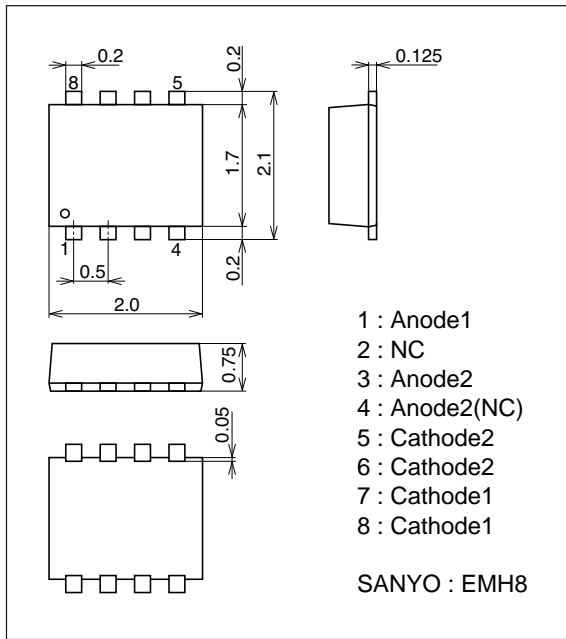
SBE817

Electrical Characteristics at Ta=25°C

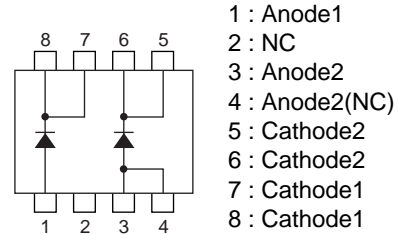
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V _R	I _R =0.3mA	15			V
Forward Voltage	V _{F1}	I _F =1.0A		0.45	0.5	V
	V _{F2}	I _F =2.0A		0.52	0.57	V
Reverse Current	I _R	V _R =7.5V			6	μA
Interterminal Capacitance	C	V _R =10V, f=1MHz		35		pF
Reverse Recovery Time	t _{rr}	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)		65		°C / W

Package Dimensions

unit : mm (typ)
7045-004



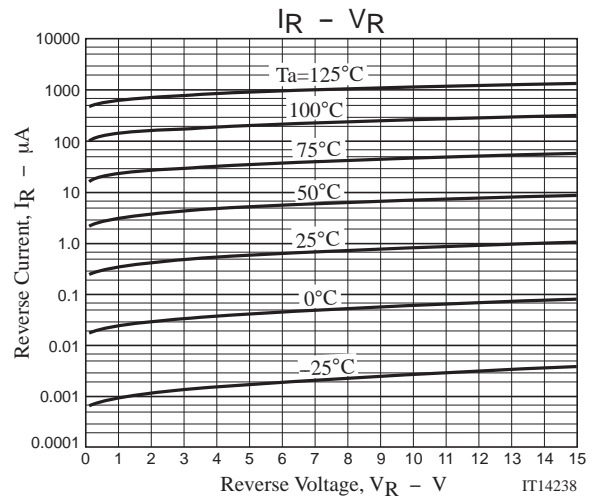
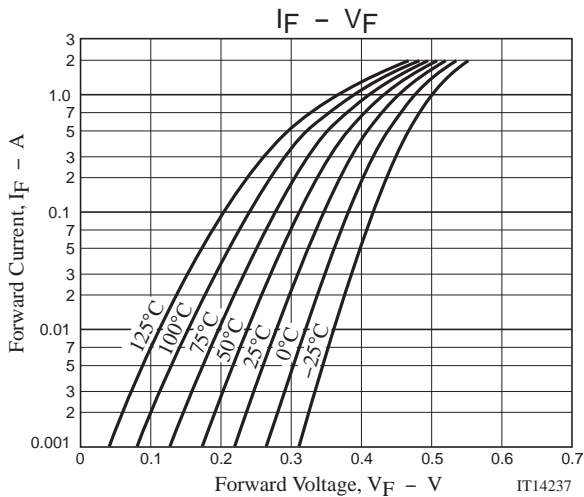
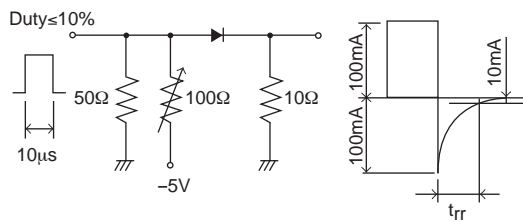
Electrical Connection

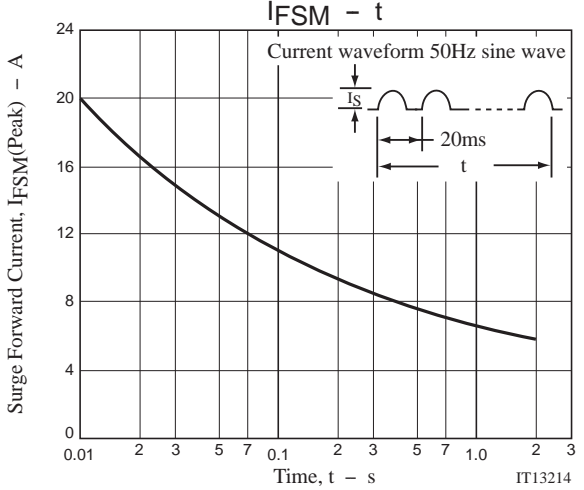
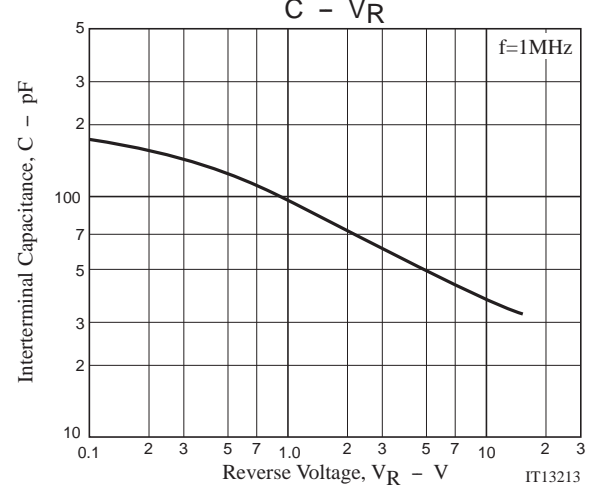
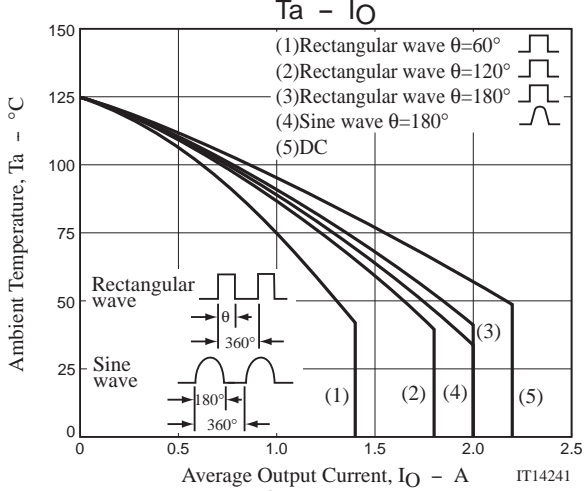
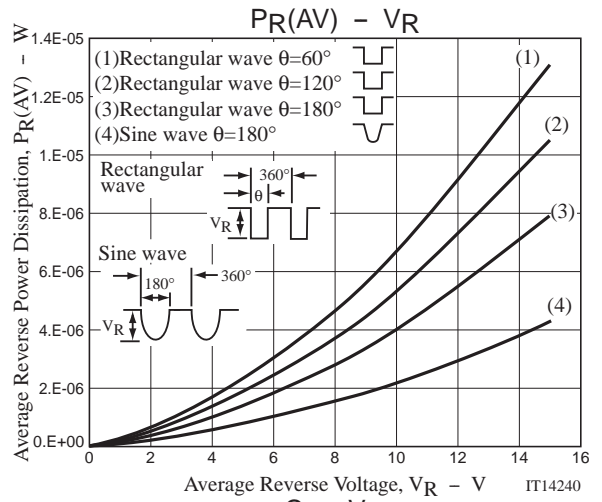
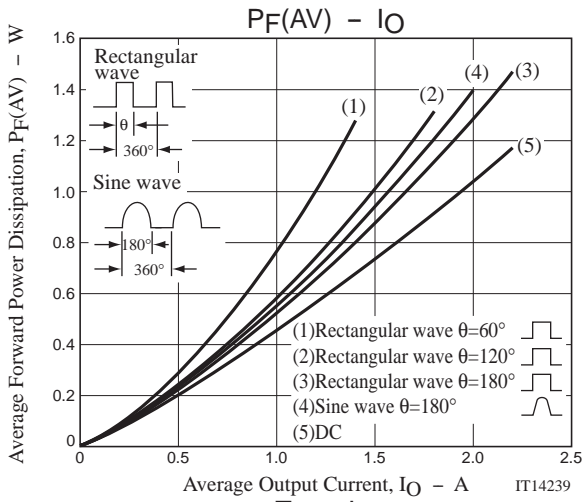


Top view

*: Terminal 4 is used for the purposes such as test. Although it is connected to Anode 2, please handle it as NC Terminal

t_{rr} Test Circuit





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