

SANYO Semiconductors DATA SHEET

An ON Semiconductor Company

SBE818 — Low IR Schottky Barrier Diode 30V, 2.0A Rectifier

Applications

· High frequency rectification (switching regulators, converters, choppers)

Features

- · Composite type device with 2 low IR SBD shoused in one package, facilitating high density mounting
- · Small switching noise
- Low forward voltage (I_F=2.0A, V_F max=0.62V)
- Low reverse current ($V_R=15V$, $I_R max=7.5\mu A$)
- · Ultrasmall package permitting applied sets to be small and slim (Mounting height 0.75mm)

Specifications

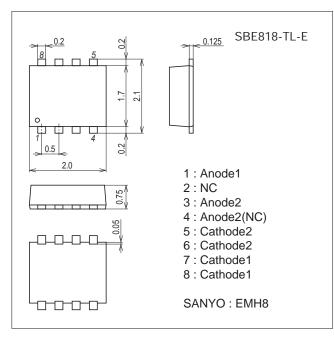
Absolute Maximum Ratings at Ta=25°C (Value per element)

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	VRRM		30	V
Nonrepetitive Peak Reverse Surge Voltage	V _{RSM}		30	V
Average Output Current	I ₀	When mounted on ceramic substrate, Rectangular wave 180°C	2.0	А
		When mounted on glass epoxy substrate	1.5	А
Surge Forward Current	I _{FSM}	50Hz sine wave, 1 cycle	20	А
Junction Temperature	Tj		-55 to +125	°C
Storage Temperature	Tstg		-55 to +125	°C

^{*:} 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)

Package Dimensions

unit : mm (typ) 7045-004



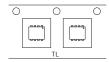
Product & Package Information

• Package : EMH8

• JEITA, JEDEC : -

• Minimum Packing Quantity : 3,000 pcs./reel

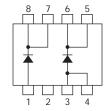
Packing Type: TL



Marking



Electrical Connection



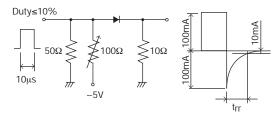
*: Terminal 4 is used for the purposes such as test. Although it is connected to Anode 2, please handle it as NC Terminal.

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Electrical Characteristics at Ta=25°C (Value per element)

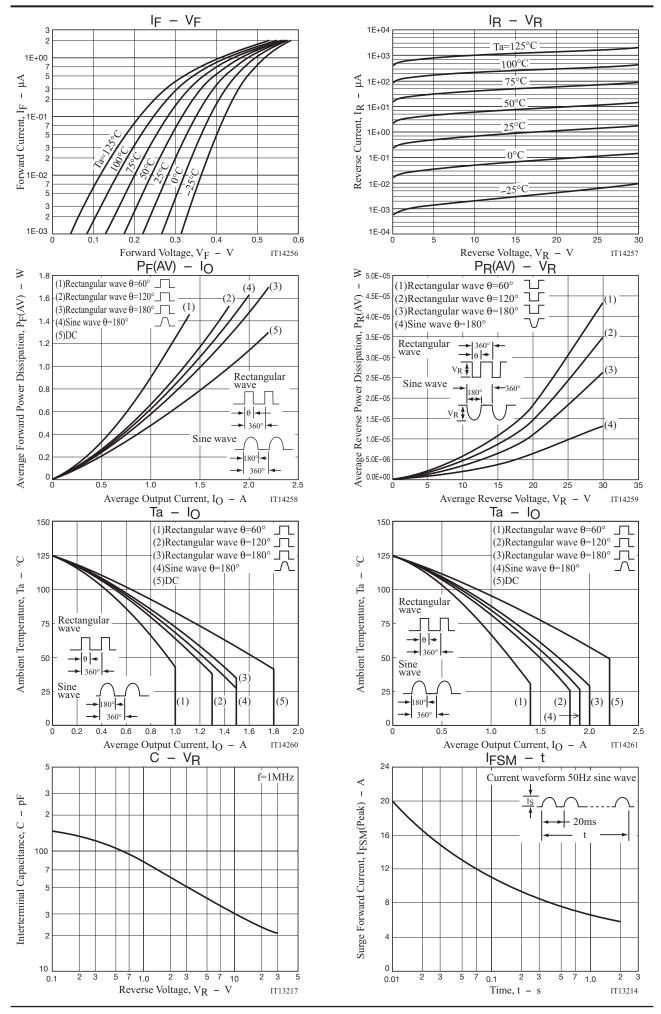
Parameter	Symbol	Conditions		Unit			
Parameter	Symbol	Conditions	min	typ	max	Uill	
Reverse Voltage	VR	I _R =1mA	30			V	
	V _F 1	I _F =1.0A		0.48	0.53	V	
Forward Voltage	V _F 2	I _F =1.5A		0.53	0.58	V	
	V _F 3	I _F =2.0A		0.57	0.62	V	
Reverse Current	IR	V _R =15V			7.5	μΑ	
Interterminal Capacitance	С	V _R =10V, f=1MHz		30		pF	
Reverse Recovery Time	t _{rr}	I _F =I _R =100mA, See specified Test Circuit.			10	ns	
	Rth(j-a)1	When mounted in Cu-foiled area of		100		°C / W	
Thermal Resistance		0.96mm ² ×0.03mm on glass epoxy substrate	100			C / W	
	Rth(j-a)2	When mounted on ceramic substrate (900mm ² ×0.8mm)		65		°C/W	

trr Test Circuit



Ordering Information

Device	Device Package		memo	
SBE818-TL-E EMH8		3,000pcs./reel	Pb Free	

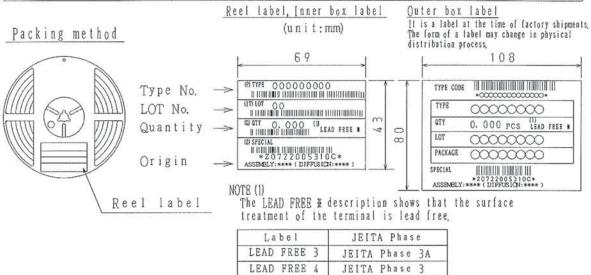


Embossed Taping Specification

SBE818-TL-E

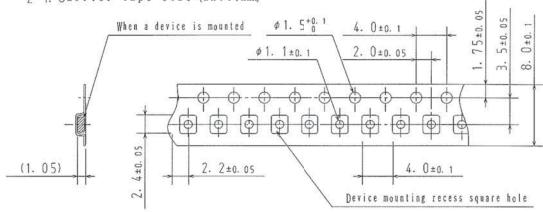
1. Packing Format

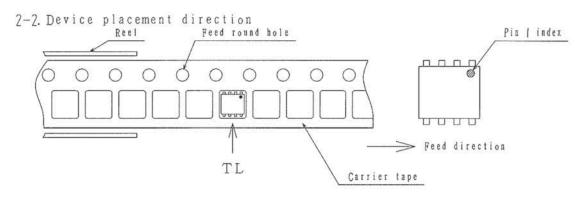
Package Name	Carrier Tape Type	Maximum Number of devices contained (pcs)			Packing format		
		Reel	Inner box	Outer box	Inner BOX (C-1)	Outer BOX (A-7)	
ЕМН8	MCP4	3, 000	15, 000	90, 000	5 reels contained Dimensions:mm (external) 183×72×185	6 inner boxes contained Dimensions:mm (external) $440 \times 195 \times 210$	



2. Taping configuration

7-1. Carrier tape size (unit:mm)

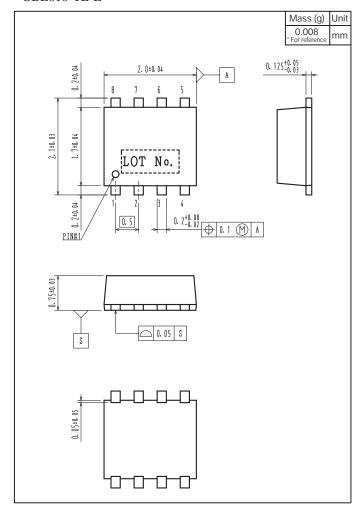




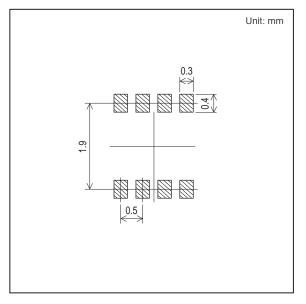
Those with pin 1 index on the feed hole side·····TL

Outline Drawing

SBE818-TL-E



Land Pattern Example



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