



SANYO Semiconductors

DATA SHEET

An ON Semiconductor Company

SBE812 — Schottky Barrier Diode 60V, 1.0A Rectifier

Applications

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

Features

- Small switching noise
- Low leakage current and high reliability due to highly reliable planar structure
- Ultrasmall package allows applied sets to be made small and thin

Specifications

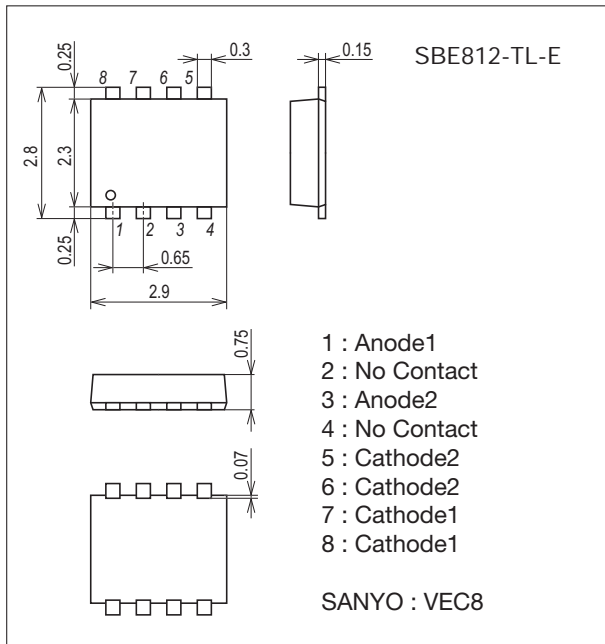
Absolute Maximum Ratings at Ta=25°C (Value per element)

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	VRRM		60	V
Nonrepetitive Peak Reverse Surge Voltage	VRSM		65	V
Average Output Current	IO		1.0	A
Surge Forward Current	IFSM	50Hz sine wave, 1 cycle	10	A
Junction Temperature	Tj		-55 to +125	°C
Storage Temperature	Tstg		-55 to +125	°C

Package Dimensions

unit : mm (typ)

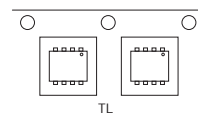
7012-001



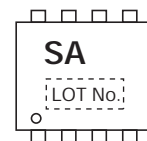
Product & Package Information

- Package : VEC8
- JEITA, JEDEC : -
- Minimum Packing Quantity : 3,000 pcs./reel

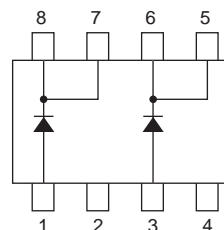
Packing Type : TL



Marking



Electrical Connection

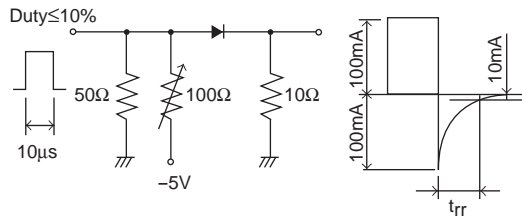


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Electrical Characteristics at Ta=25°C (Value per element)

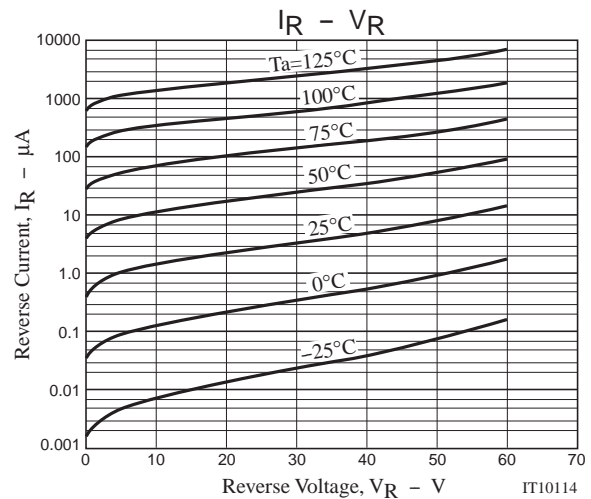
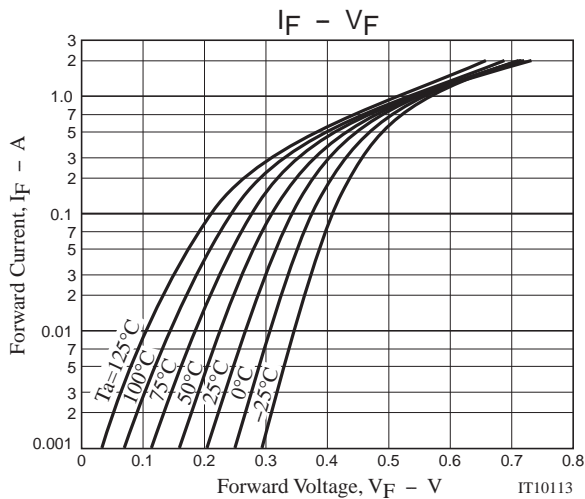
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V_R	$I_R=0.2mA$	60			V
Forward Voltage	V_F	$I_F=1A$		0.55	0.60	V
Reverse Current	I_R	$V_R=30V$			30	μA
Interterminal Capacitance	C	$V_R=10V, f=1MHz$		35		pF
Reverse Recovery Time	t_{rr}	$I_F=100mA$, See specified Test Circuit.			10	ns
Thermal Resistance	Rth(j-a)1	When Mounted in Cu-foiled area of 1.92mm ² ×0.03mm on glass epoxy substrate		80		°C / W
	Rth(j-a)2	When mounted on ceramic substrate (1000mm ² ×0.8mm)		75		°C / W

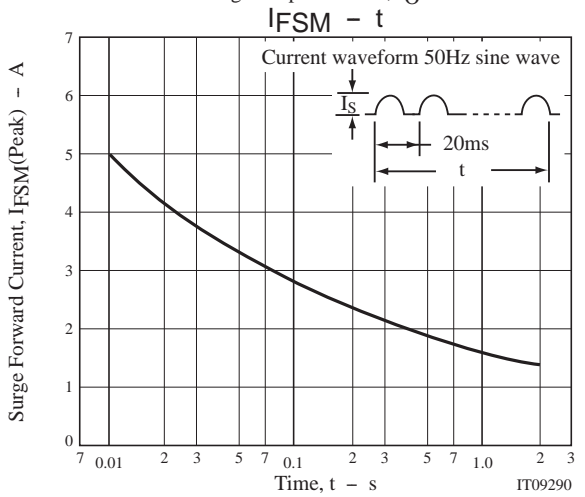
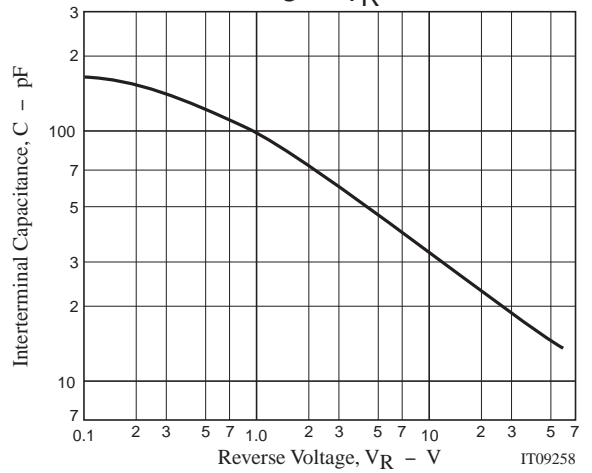
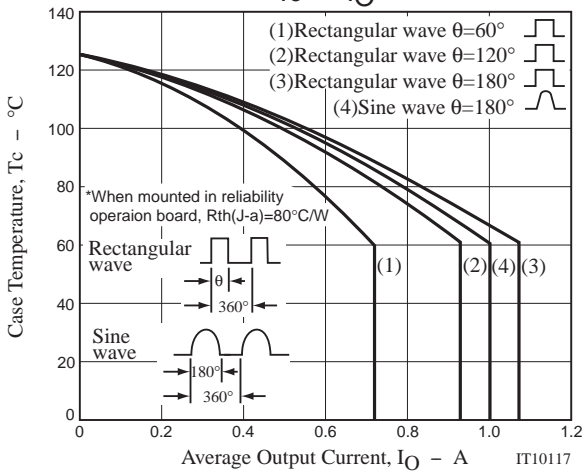
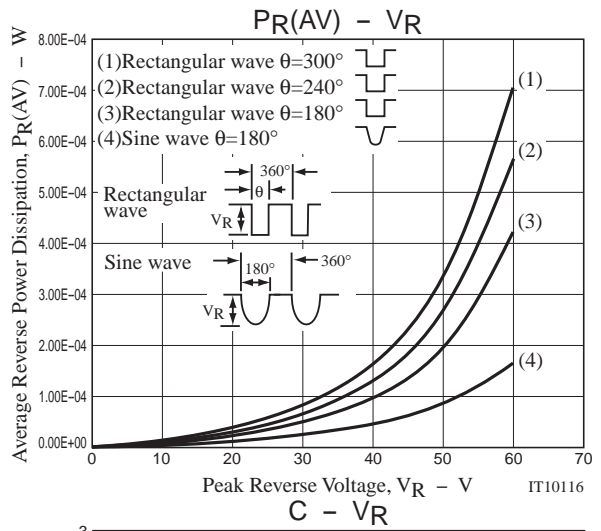
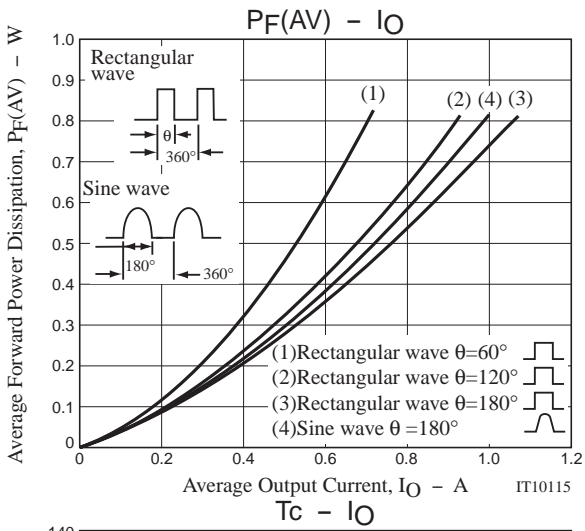
t_{rr} Test Circuit



Ordering Information

Device	Package	Shipping	memo
SBE812-TL-E	VEC8	3,000pcs./reel	Pb Free





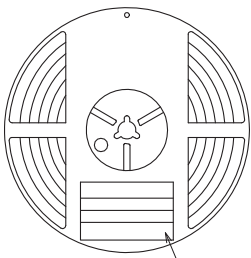
Taping Specification

SBE812-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)
VEC8	CPH6	3,000	15,000	90,000	5 reels contained Dimensions:mm (external) 183×72×185	6 inner boxes contained Dimensions:mm (external) 440×195×210

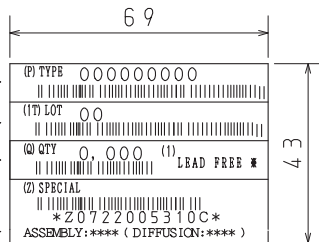
Packing method



Reel label

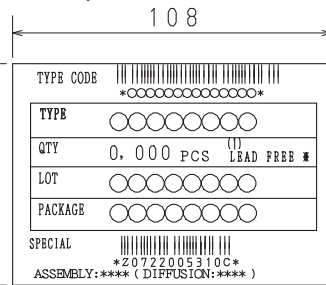
Type No.
LOT No.
Quantity
Origin

Reel label, Inner box label (unit:mm)



Outer box label

It is a label at the time of factory shipments. The form of a label may change in physical distribution process.



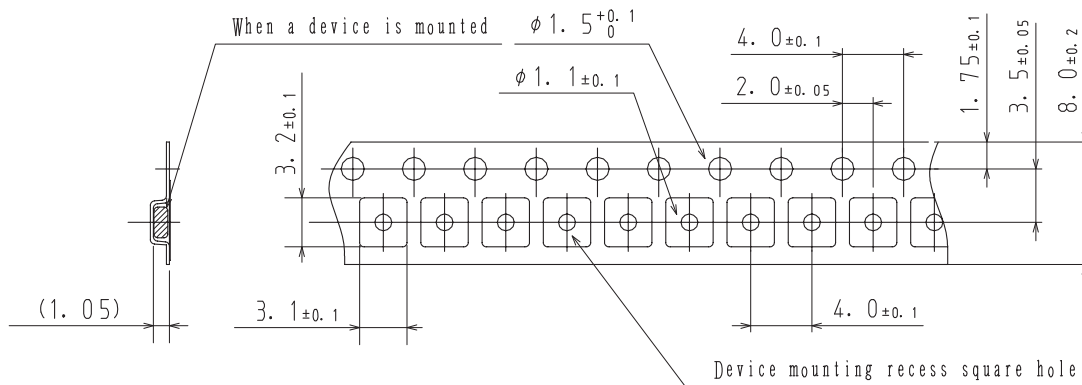
NOTE (1)

The LEAD FREE * description shows that the surface treatment of the terminal is lead free.

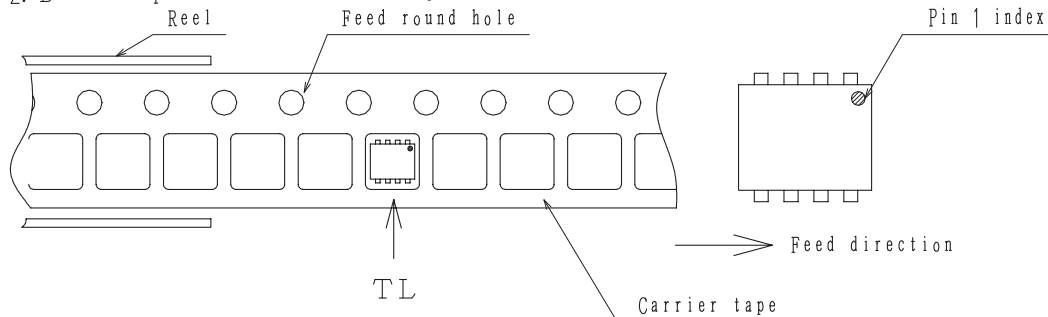
Label	JEITA Phase
LEAD FREE 3	JEITA Phase 3A
LEAD FREE 4	JEITA Phase 3

2. Taping configuration

2-1. Carrier tape size (unit:mm)



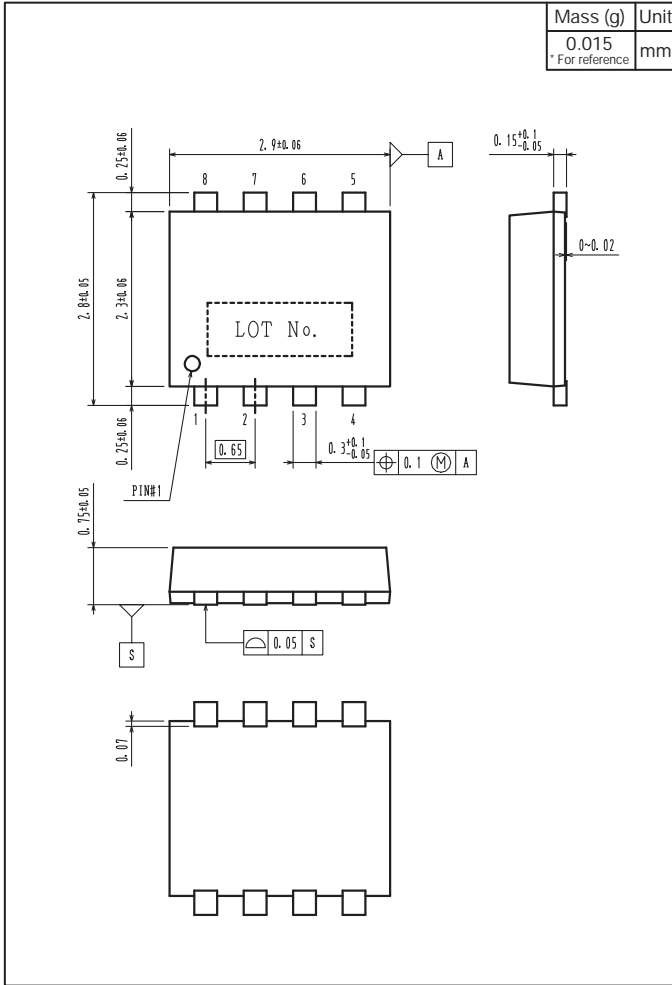
2-2. Device placement direction



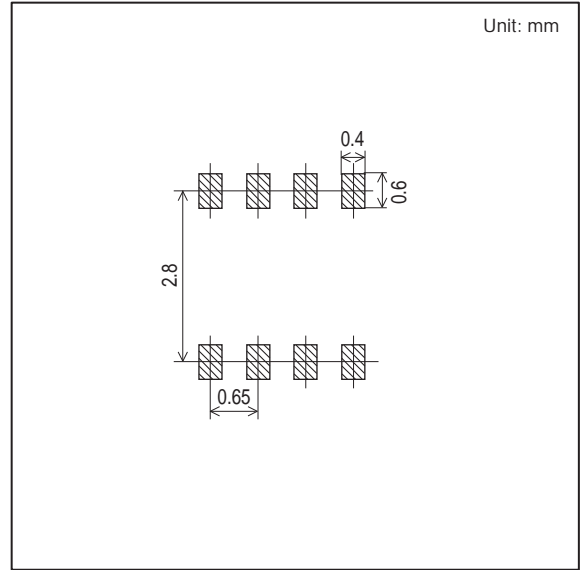
Those with oen electrode terminal on the feed hole side.....TL

SBE812

Outline Drawing SBE812-TL-E



Land Pattern Example



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