



SANYO Semiconductors

DATA SHEET

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	V_{RRM}		60	V
Nonrepetitive Peak Reverse Surge Voltage	V_{RSM}		65	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	°C
Storage Temperature	T_{stg}		-55 to +125	°C

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	$R_{th(j-a)1}$	Mounted in Cu-foiled area of 1.92mm ² ×0.03mm on glass epoxy board		80		°C / W
	$R_{th(j-a)2}$	Mounted on a ceramic board (1000mm ² ×0.8mm)		75		°C / W

Marking : SA

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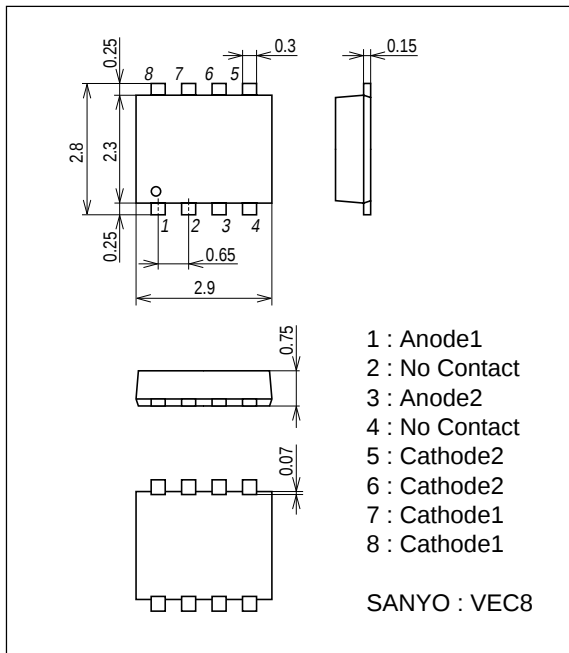
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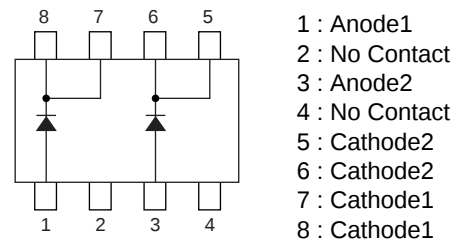
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Package Dimensions

unit : mm
7012-001

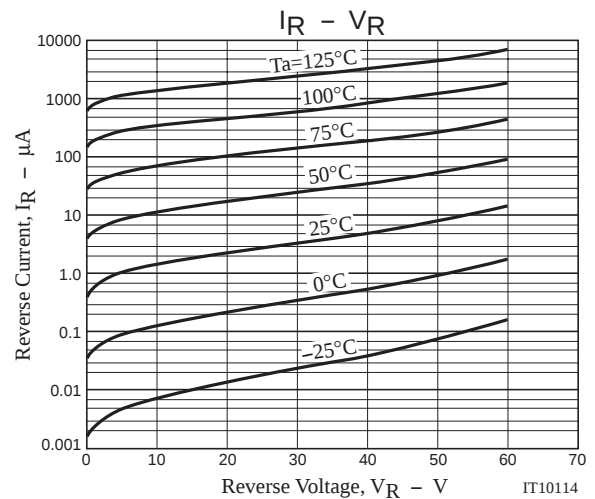
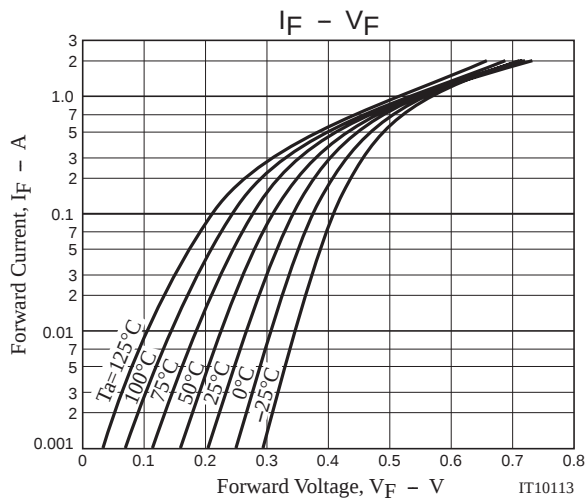
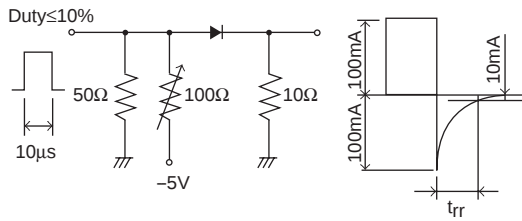


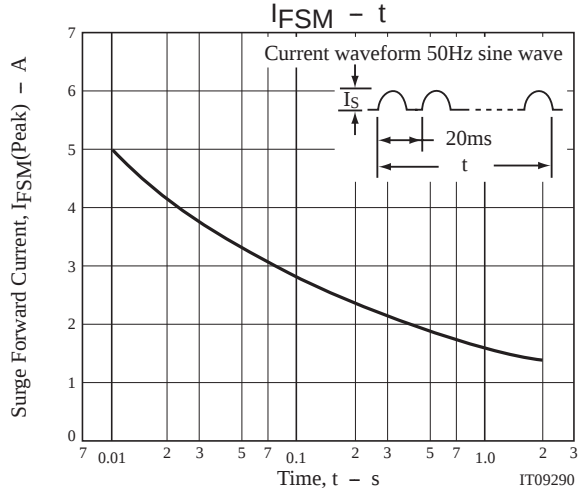
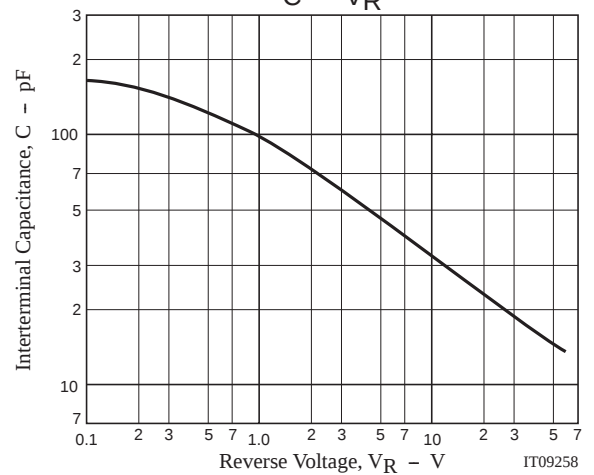
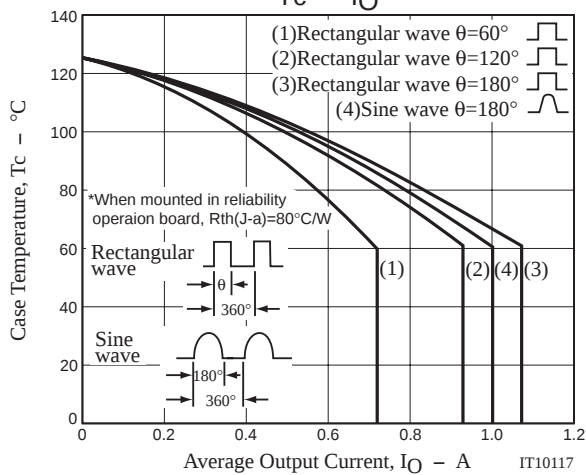
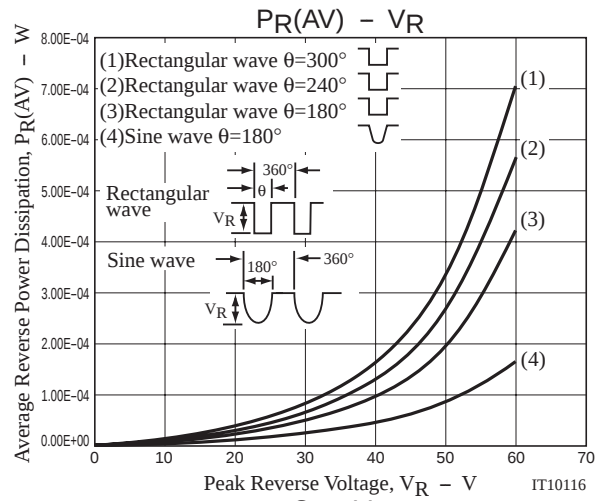
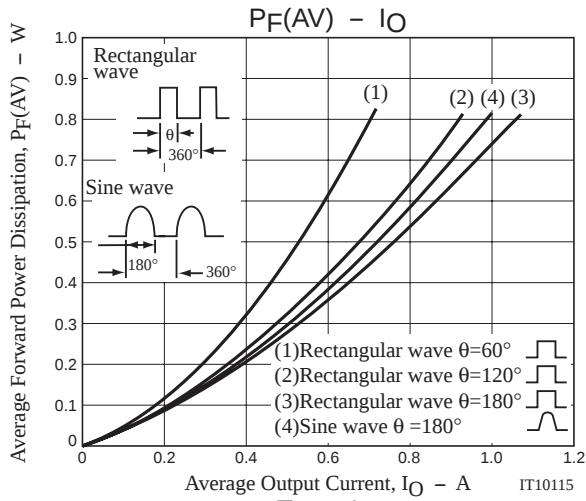
Electrical Connection



Top view

t_{rr} Test Circuit





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