



SANYO Semiconductors

DATA SHEET

An ON Semiconductor Company

SBS822

 — Low V_F Schottky Barrier Diode

20V, 1A Rectifier

Applications

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

Features

- Low forward voltage ($I_F=0.5A$, $V_F \text{ max}=0.39V$) ($I_F=1A$, $V_F \text{ max}=0.46V$).
- Composite type with 2 low V_F SBDs in one package, facilitating high-density mounting.
- Ultrasmall-size package permitting applied sets to be small and slim (Mounting height 0.85mm).
- Halogen free compliance.

Specifications

Absolute Maximum Ratings at $T_a=25^\circ\text{C}$ (Value per element)

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	V_{RRM}		20	V
Nonrepetitive Peak Reverse Surge Voltage	V_{RSM}		20	V
Average Output Current	I_O	When mounted on ceramic substrate (1000mm ² ×0.8mm) Rectangular wave	1	A
Surge Forward Current	I_{FSM}	50Hz sine wave, 1 cycle	5	A
Junction Temperature	T_j		-55 to +125	$^\circ\text{C}$
Storage Temperature	T_{stg}		-55 to +125	$^\circ\text{C}$

Electrical Characteristics at $T_a=25^\circ\text{C}$ (Value per element)

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V_R	$I_R=0.5\text{mA}$	20			V
Forward Voltage	V_{F1}	$I_F=0.5A$		0.34	0.39	V
	V_{F2}	$I_F=0.7A$		0.37	0.42	V
	V_{F3}	$I_F=1A$		0.41	0.46	V
Reverse Current	I_R	$V_R=10V$			110	μA

Marking : SJ

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SBS822

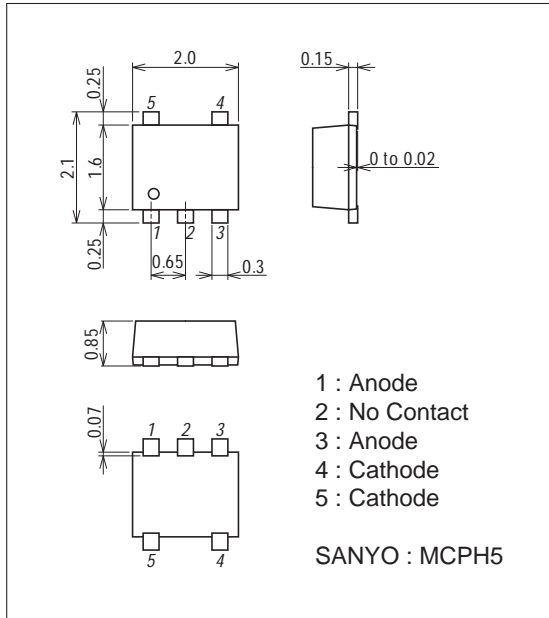
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Interterminal Capacitance	C	$V_R=10V, f=1MHz$		19		pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=100mA$, See specified Test Circuit.			10	ns
Thermal Resistance	$R_{th(j-a)}$	When mounted on ceramic substrate (1000mm ² ×0.8mm)		130		°C / W

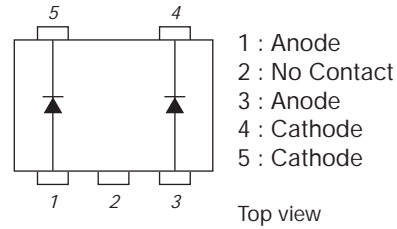
Package Dimensions

unit : mm (typ)

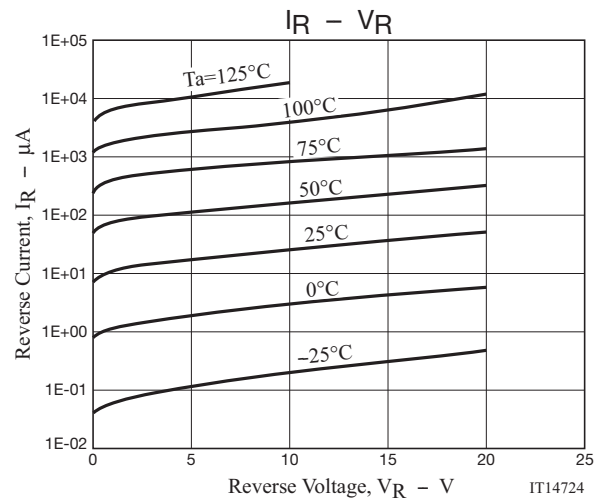
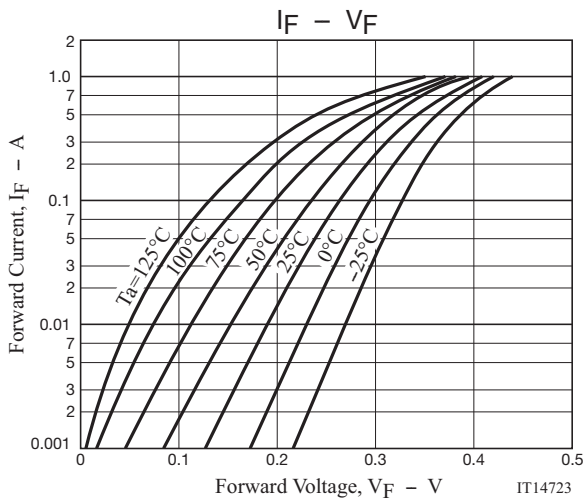
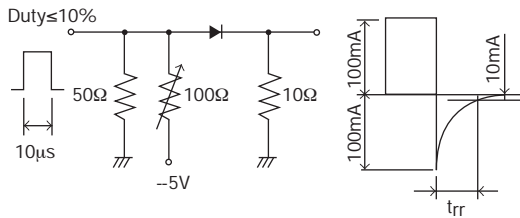
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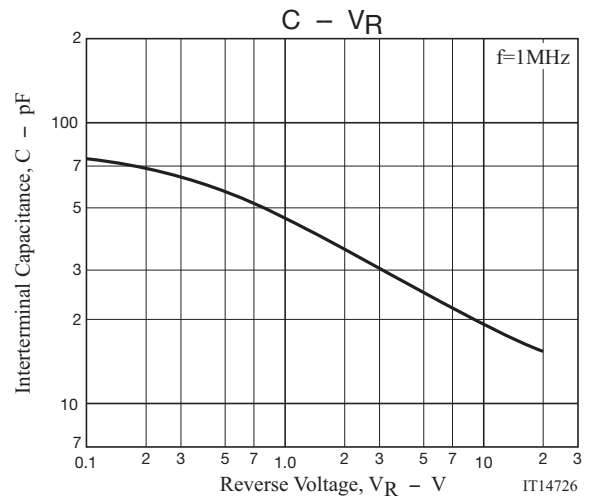
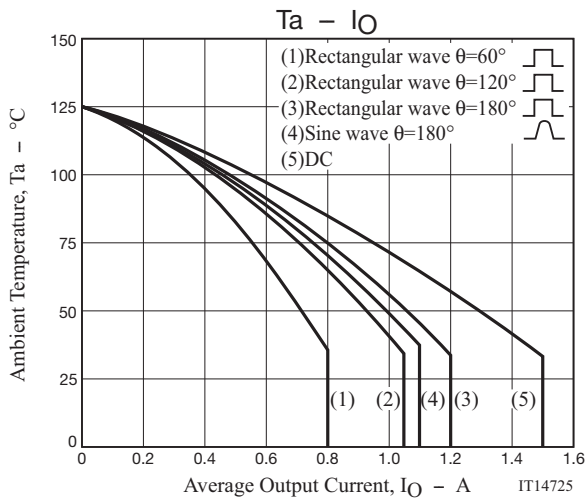


Electrical Connection



t_{rr} Test Circuit





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