SBS822



ON Semiconduc

Schottky Barrier Diode 20V, 1A, Low VF Dual MCPH5

Applications

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

Features

- Low forward voltage (IF=0.5A, VF max=0.39V) (IF=1A, VF max=0.46V).
- · Composite type with 2 low VF 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

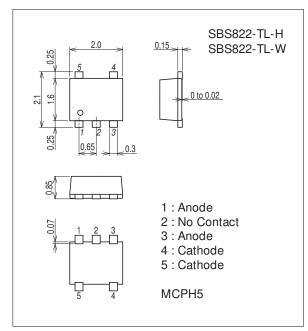
Absolute Maximum Ratings at Ta=25°C (Value per element)

Parameter	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	VRRM		20	V
Nonrepetitive Peak Reverse Surge Voltage	VRSM		20	V
Average Output Current	I _O	When mounted on ceramic substrate (1000mm ² x0.8mm) Rectangular wave	1	Α
Surge Forward Current	I _{FSM}	50Hz sine wave, 1 cycle	5	Α
Junction Temperature	Tj		-55 to +125	°C
Storage Temperature	Tstg		-55 to +125	°C

Stresses exceeding Maximum Ratings may damage the device. Maximum Ratings are stress ratings only. Functional operation above the Recommended Operating Conditions is not implied. Extended exposure to stresses above the Recommended Operating Conditions may affect device reliability.

Package Dimensions

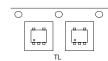
unit : mm (typ) 7021A-001



Ordering & Package Information

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Device	Package	Shipping	note	
SBS822-TL-H	MCPH5 SC-88A, SC-70-5, SOT-353	3,000 pcs./reel	Pb-Free and	
SBS822-TL-W	MCPH5 SC-88A, SC-70-5, SOT-353	3,000 pcs./reel	Halogen Free	

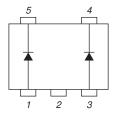
Packing Type: TL



Marking



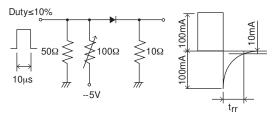
Electrical Connection

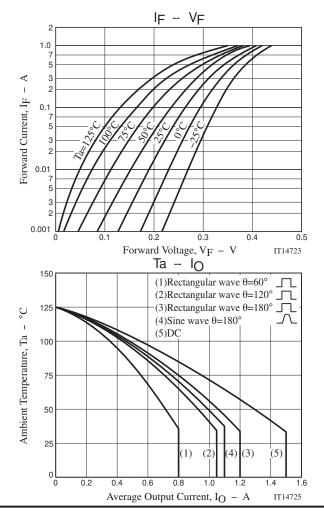


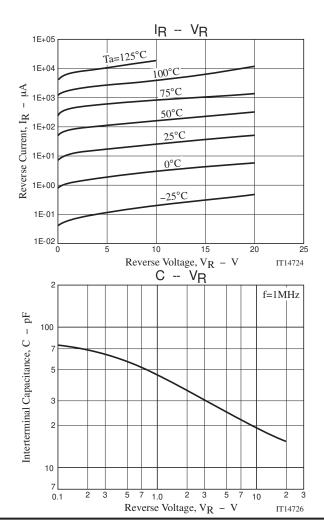
Electrical Characteristics at Ta=25°C (Value per element)

Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Unit
Reverse Voltage	VR	I _R =0.5mA	20			V
Forward Voltage	V _F 1	IF=0.5A		0.34	0.39	V
	V _F 2	IF=0.7A		0.37	0.42	V
	V _F 3	I _F =1A		0.41	0.46	٧
Reverse Current	IR	V _R =10V			110	μΑ
Interterminal Capacitance	С	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	Rth(j-a)	When mounted on ceramic substrate (1000mm ² x0.8mm)		130		°C / W

trr Test Circuit





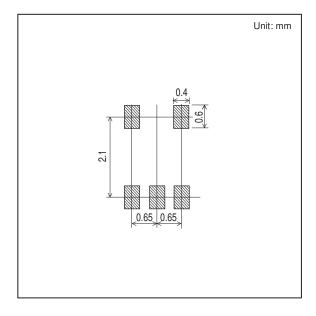


Outline Drawing

SBS822-TL-H, SBS822-TL-W

Mass (g) Unit 0.008 For reference mm 0. 15^{+0. 1}_{-0. 03} 0. 25±0.06 2. O±0.06 5 4 0~0.02 2, 1±0, 05 1.6±0.06 0 0. 3+0. 1 0. 1 M A 2 0. 65 PIN#1 0.85±0.05 0. 05 S *1:Lot indication

Land Pattern Example



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