Ordering number : ENA1504A

SBS822

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

ON Semiconductor®
http://onsemi.com

Applications

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

Features

- Low forward voltage (I_F=0.5A, V_F max=0.39V) (I_F=1A, V_F 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

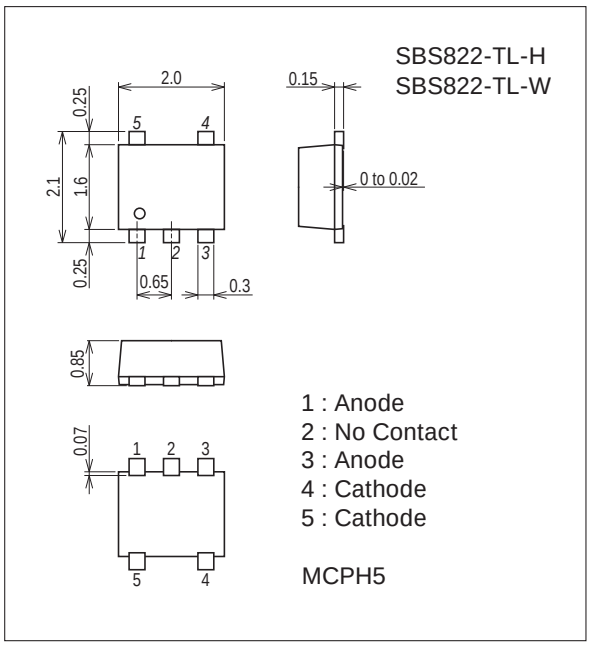
Absolute Maximum Ratings at Ta=25°C (Value per element)

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	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

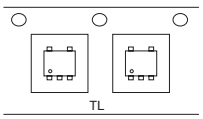
unit : mm (typ)
7021A-001



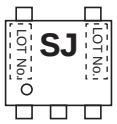
Ordering & Package Information

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

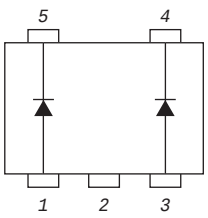
Packing Type : TL



Marking



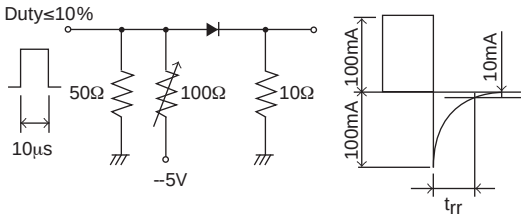
Electrical Connection

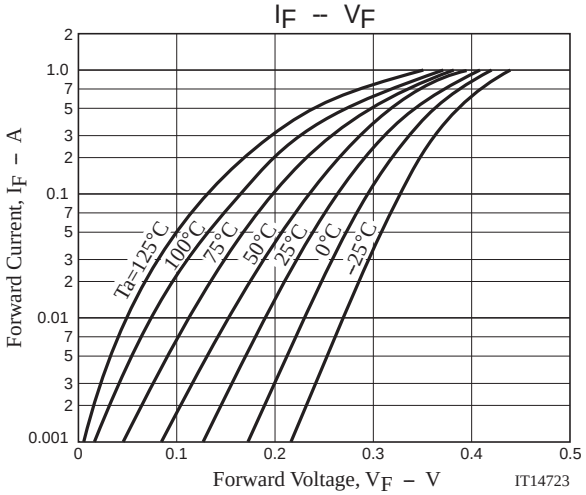


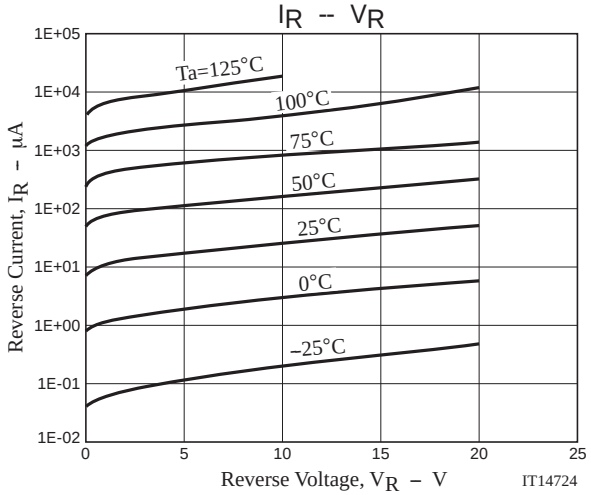
Electrical Characteristics at Ta=25°C (Value per element)

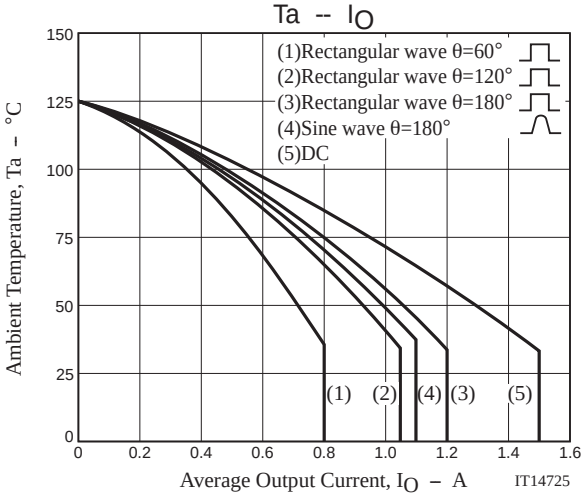
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Reverse Voltage	V_R	I_R=0.5mA	20			V
Forward Voltage	V_F1	I_F=0.5A		0.34	0.39	V
	V_F2	I_F=0.7A		0.37	0.42	V
	V_F3	I_F=1A		0.41	0.46	V
Reverse Current	I_R	V_R=10V			110	μA
Interterminal Capacitance	C	V_R=10V, f=1MHz		19		pF
Reverse Recovery Time	t_{rr}	I_F=I_R=100mA, See specified Test Circuit.			10	ns
Thermal Resistance	Rth(j-a)	When mounted on ceramic substrate (1000mm²x0.8mm)		130		°C / W

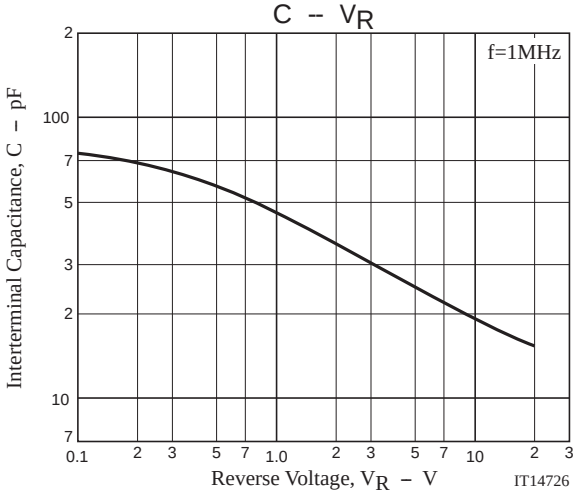
t_{rr} Test Circuit





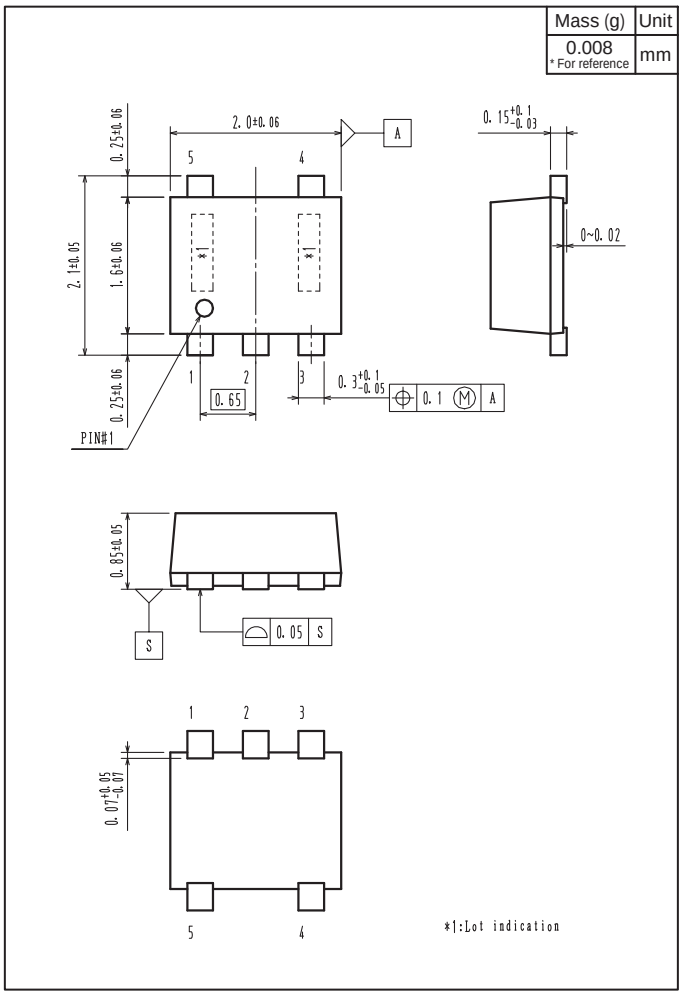




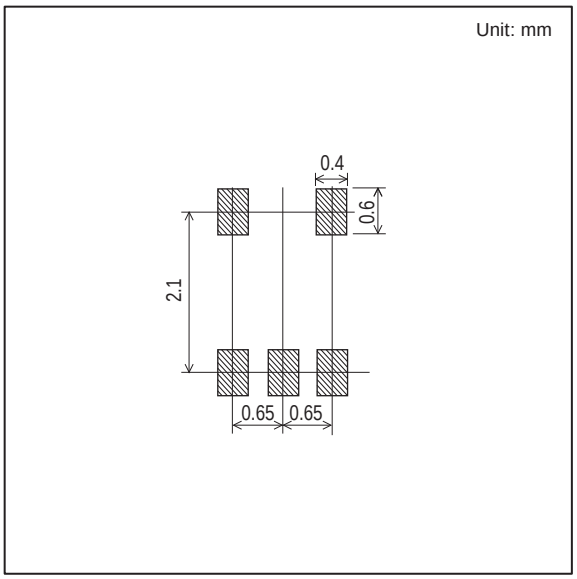


Outline Drawing

SBS822-TL-H, SBS822-TL-W



Land Pattern Example



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