TSB

Features:

Panel Mountable

Fully Connectorized

Wirewound High-Temperature Ceramic Resistors

WIMA Metal Film Capacitors

Applications:

Plating Rectifiers

Battery Chargers

Wind Turbine Controllers

DC Drives

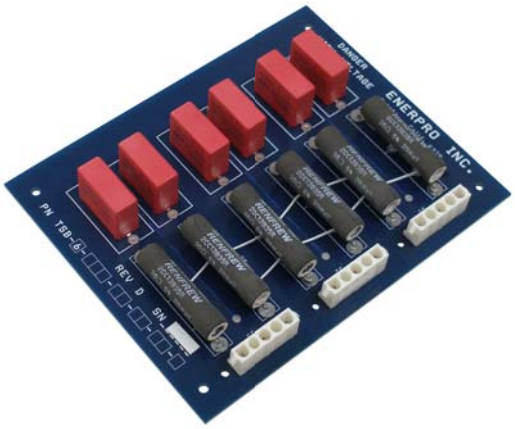
Semiconverters

UPS Systems

Transformer Primary Controllers

TSB Connectorized Snubber Circuit Boards

Description
Enerpro's TSB family of snubber circuit boards provide high-quality RC snubber circuits in a convenient, connectorized , panel-mountable package. Models with one, two, three and six circuits are available. These boards provide the static power conversion industry with a rugged, reliable snubber product that reduces design time and minimizes inventory requirements.



Application
In SCR converters or AC controllers, a high rate-of-rise in anode-to-cathode voltage, or dV/dt, occurs when an SCR conducts or commutates. Inductive loads typically induce high peak voltages when the SCR current is interrupted. Resistor-capacitor snubber circuits limit the dV/dt across the SCRs, preventing erratic operation and device damage.

Available Circuits
TSB-1: Single RC circuit for use in anti-parallel SCR AC controller applications.

TSB-2: Two RC circuits for use in SCR bridge rectifier circuits or other applications where two SCRs share a common connection.

TSB-3: Three RC circuits for three-phase AC controllers or semiconverters .

TSB-6: Six RC circuits provide flexibility for a variety of three-phase applications, including:

- In-line AC controllers
- Two-speed motor starters
- Reversing motor starters
- Star converters
- Six- or twelve-pulse bridge converters
- Tap changers

Operational Features
The TSB family utilizes WIMA brand high voltage, pulse-rated metal film capacitors exclusively for their superior performance, reliability, and service life.

Amp Universal Mate-N- Lok® connectors provide easy installation and replacement; connector tooling is identical to all other Enerpro firing and regulator board products.

Creepage distances exceed 10 mm (0.4 inches) for operation to 600 Vac as specified in UL-508.

All circuit boards are assembled at the Enerpro plant in Goleta, California and are manufactured by a UL-approved fabricator from 2.4 mm thick FR4 fire-resistant fiberglass epoxy laminate with one-ounce copper and full solder mask. All boards are protected with urethane conformal coating per MIL-1-46058, Type UR to provide excellent performance at high line voltages.

Enerpro *applications engineers are available by e-mail or fax for applications assistance.*

Board Dimensions		
Model	***L x W x D (mm)***	***Mounting Centers (mm)***
TSB-1	64 x 127 x 31	48 X 115
TSB-2	112 x 127 x 31	97 X 115
TSB-3/6	191 x 127 x 31	172 x 115
TSB-6/12	191 x 153 x 31	172 x 127

Ordering Guide		
Parameter	***Description***	***Code***
Number of Snubber Circuits	**1** **2** **3** **6**	
Mains Voltage	**XX** Note maximum ac mains voltage Specify code as Mains Voltage divided by 10. (Example: 480 V / 10 = 48)	
*Load Type ** **(TSB-6 only)**	**AC** * Note: Only indicate AC or DC if using **DC** TSB-6 Snubber Boards	
Capacitor Value (uF x 100)	**XX** (Indicate Capacitor Value)	
Resistor Value (Ohms)	**XX** (Indicate Resistor Value)	
Resistor Power (Watts)	**XX** (Indicate Resistor Power)	
	0 Horizontal **1** Vertical **2** Screw-in Terminal Block (applies to TSB3HG Snubbers only)	

Enerpro, Inc.
99 Aero Camino
Goleta, CA 93117 (USA)
Tel: (805) 683-2114
(877) 648-2114
Fax: (805) 964-0798
info@enerpro-inc.com
www.enerpro-inc.com