

S P E C I F I C A T I O N S

Sanken Hybrid Auto-switch Module - STR8 1145A

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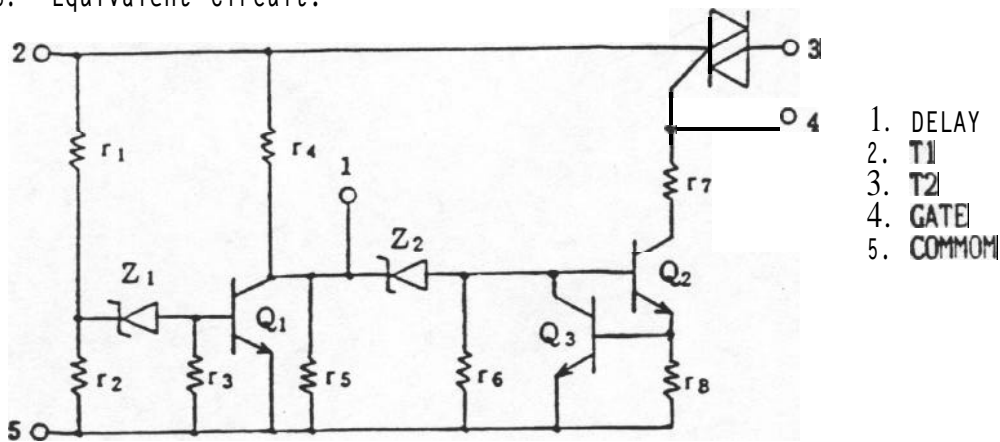
1. Scope:

The present specifications shall only apply to Sanken Hybrid Auto-switch Module, Type STR8 1145A.

2. Features:

- a) For automatic switch-over from Voltage-doubler to Bridge rectification and from Bridge rectification to Voltage-doubler.
- b) With a planar Triac incorporated.
- c) Fixed Switch-over Voltage
- d) Plastic Package (Transfer Mold)

3. Equivalent Circuit:



4. Outline Drawings, Dimensions and Pin Connections are per Fig-1.

5. The type number and lot number shall be legitimately marked in white.

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DATE: FEB. 25, '88	APPROVED BY	Ni. Sakurai		

6. Absolute Maximum Ratings (Ta = 25°C)

Description	Symbol	Unit	Conditions	Ratings
Peak Repetitive Off-state Voltage	VDRM	v	Tj = -10 ~ +125 °C	500
Static On-state Current	IT(RMS)	A	Tj = 125°C Conduction Angle=360°	10.0
Surge On-state Current	ITMS	A	Tj = 125°C 50Hz, Full Sine Wave Peak Value, Non-repetitive	100
# Operating Temperature	Top	°C		-10~+100(Tc)
Storage Temperature	Tstg	°C		-30~+125
Junction Temperature	Tj	°C		+125

#1 Temperature of Frame

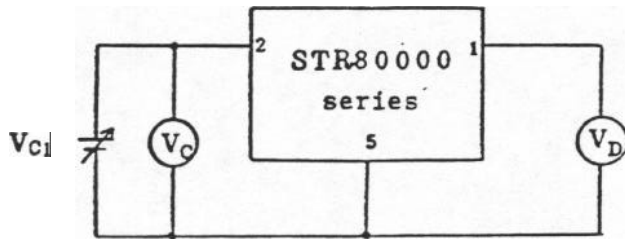
7. Electrical Characteristics (Ta = 25°C)

Description	Symbol	Unit	Conditions,	Rating
Starting Voltage of Voltage Doubler	vs	V(AC)	Test Circuit 2	80 Max
Fixed Switch-over Voltage	1 VC1	V	Test Circuit 1	196 ± 5
	2 vc2	V(AC)	Test Circuit 2	145
Temperature Coefficient of Switch-over Voltage	Kt	mV/°C	Test Circuit 1 TC = -10 ~ +100°C	-30 Typ
Off-state Current	IDRM	μA	VD = VDRM, Rgk = ∞	100 Max
On-state Voltage	VTM	V	ITM = 10A	1.8 Max
Thermal Resistance	θj-c	°C/W	Between Junction and Frame	1.8

\*\* 1 VC2 is just a reference value.

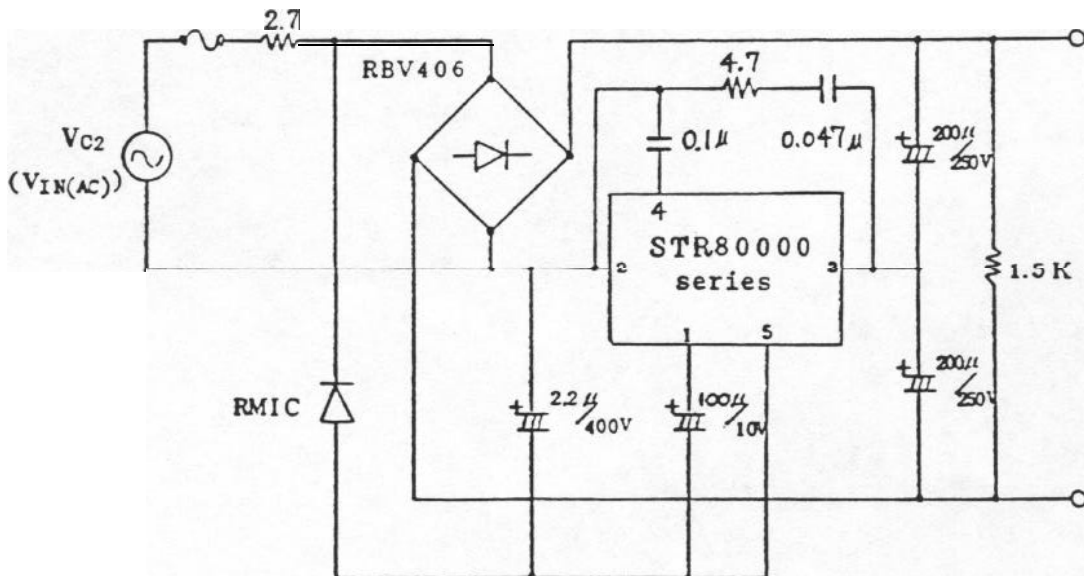
\* Recommended Screw Torque : 6 ~ 8kg.f.cm  
 Recommended Silicone Grease : G-746 (Shinetsu Chemical Industries Ltd.)  
 YG6260 (Toshiba Silicone Co.,Ltd.)  
 SC102 (Toray Silicone Co.,Ltd.)

Fixed Output Voltage Test Circuit (Test Circuit 1)



Fixed Switch-over Voltage 1 is defined as voltage which gets  $V_D$  being 3V.

Actual Working Circuit (Test Circuit 2)





PT(AV) - IT(RMS) Characteristics

