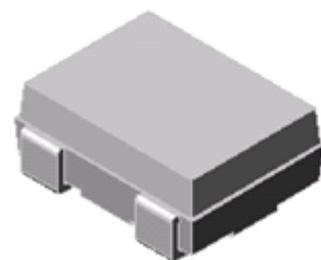
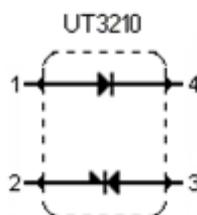


**Features**

- Included a trigger chip and a rectifier chip
- Glass passivated chip junctions
- Low leakage current

Mechanical Data

- **Case:** JESD 30E PSOJ-4 molded plastic body over glass passivated chip
- **Terminals:** Solder plated, solderable per J-STD-002B and JESD22-B102D
- **Weight:** 0.046g



JESD 30E : PSOJ-4
RS : RS-C2

Typical Applications

- For use in energy conservation electronic Ballasts fluorescent lamps

Maximum Ratings ($T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Value	Unit
Repetitive peak on-state current($t_p=20\mu\text{s}$ $F=100\text{Hz}$) for Trigger Diode	I_{TRM}	2.0	A
Power Dissipation for Trigger Diode ($T_A=50\text{ }^\circ\text{C}$)	P_D	150	mW
Maximum average forward rectified current for Rectifier	$I_{F(AV)}$	0.4	A
Maximum repetitive peak reverse voltage for Rectifier	V_{RRM}	1000	V
Maximum non-repetitive peak reverse voltage for Rectifier	V_{RSM}	700	V
Peak forward surge current (8.3 ms half sine-wave) for Rectifier	I_{FSM}	10	A
Thermal resistance from junction to ambient (Note 1)	$R_{\theta JA}$	112	$^\circ\text{C}/\text{W}$
Operating junction and storage temperature range	T_J, T_{stg}	- 40 ~ 125	$^\circ\text{C}$

Note1: Mounted on FR-4 P.C.B. with soldering pad.

Electrical Characteristics for Trigger diode($T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Min	Type	Max	Unit
Breakover voltage at $C=22\text{nF}$	V_{BO}	28	-	36	V
Dynamic breakover voltage at $\Delta I = [I_{BO} \text{ to } I_F=10\text{mA}]$	ΔV	5	10	-	V
Breakover current at $C=22\text{nF}$	I_{BO}	-	-	10	μA
Leakage current at $V_B=0.5V_{BO}$ max	I_B	-	-	1.0	μA
Reverse current at $V_R=6\text{V}$	I_R	-	-	5.0	μA
Peak current (see diagram 4)	I_P	1.0	-	-	A
Rise time (see diagram 5)	t_r	-	-	1.5	μs

Electrical Characteristics for Rectifier ($T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Min	Type	Max	Unit
Repetitive peak reverse voltage	V_{RRM}	1000	-	-	V
Forward voltage at $I_F=0.4\text{A}$	V_F	-	0.93	1.1	V
Reverse current at $V_R=1000\text{V}$	I_R	-	-	2.0	μA





UT3210

Surface Mount Compound Function Triggers

Voltage-current characteristics for Trigger Diode

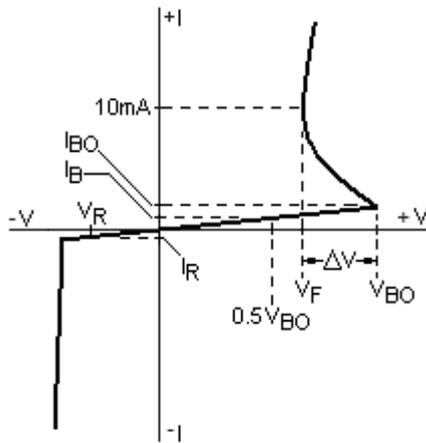


DIAGRAM 1

Marking

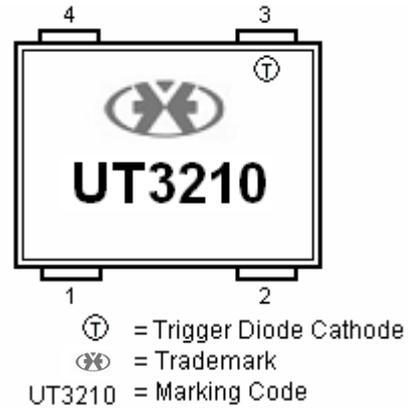


DIAGRAM 2

Recommended circuit connection

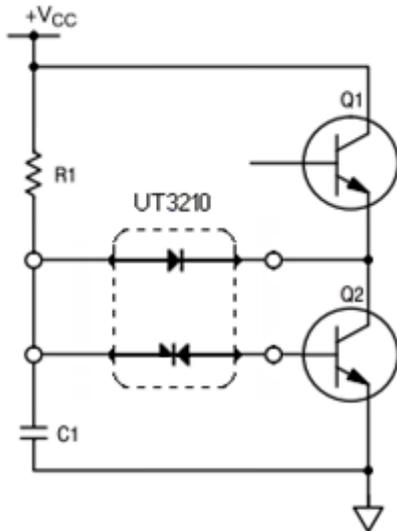


DIAGRAM 3

Test circuit for Trigger Diode

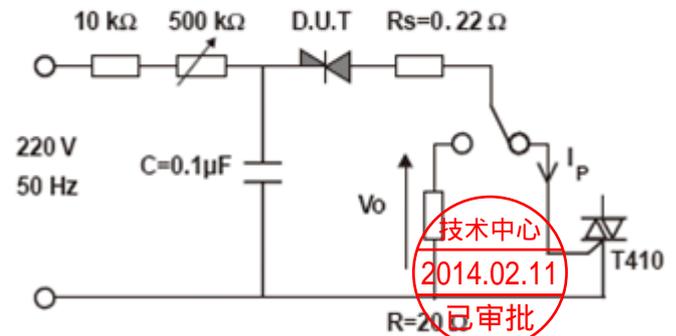


DIAGRAM 4

Rise time measurement for Trigger Diode

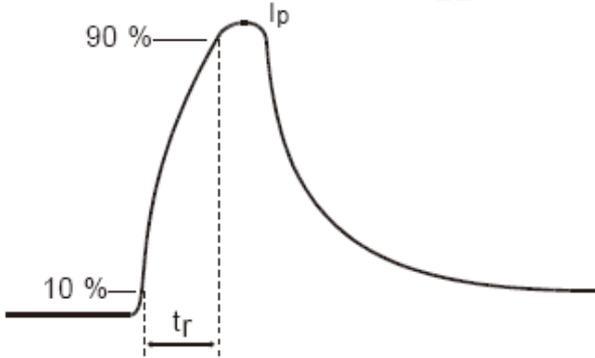


DIAGRAM 5





Package Outline Dimensions in millimeters (inches)

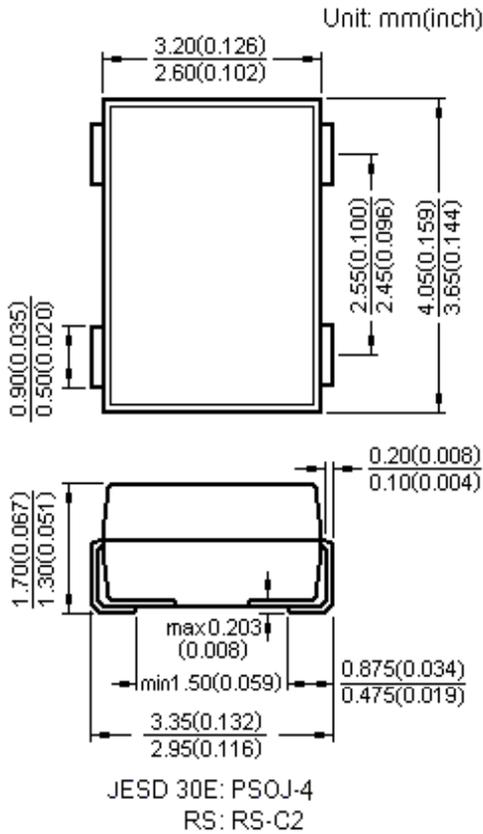


DIAGRAM 6

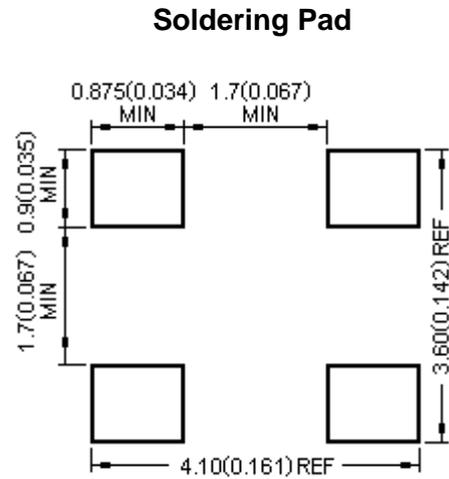


DIAGRAM 7

- is registered trademark of Rising-sun Technology. Rising-sun Technology reserves the right to make changes to any product in this specification to improve reliability, functional characteristics, or design without notice.
- Rising-sun Technology does not assure any liability arising out of the applications or any product described in this specification.
- Rising-sun Technology advises customers to obtain the latest version of the device information before placing orders to verify that the required information is current.

