

1. Scope :

This specification applies to silicon zerocrossing phototriac chips,
Device No. ST-1163

2. Structure :

- 2-1. Planar type .
- 2-2. Electrodes :aluminum alloy

3. Size :

- 3-1. Chip size : 39.4 mils × 41.3 mils (1.000 mm ×1.050mm).
- 3-2. Chip thickness : 8.3±1.0 mil (0.210± 0.025 mm).
- 3-3. Pad area : 5.5 mil × 5.3 mil (0.140 mm ×0.135 mm).
- 3-4. Pattern drawing : refer to the attached drawing.

4. Electro-optical characteristics (Ta = 25 °C)

Parameter	Symbol	Condition	Min.	Typ.	Max.	Unit
Peak Off-State Current	I_{DRM}	$V_{DRM}=660V$			80	nA
Peak on-state voltage	V_{TM}	$I_{TM}=100mA$		1.6	2.0	V
Trigger Current	I_{GT}	$V_T=3V$		6	10	uA
Inhibit Voltage	V_{INH}	$I_{DS}=10\mu A$	4	6	15	V
Resistance between G and K	R_{GK}	$V_{GK}=0.2V$	140	160	200	kΩ
npn current gain	α_{npn} (= I_C/I_E)	$V_{CB}=-3V$ $I_E=50\mu A$	0.025	0.045	0.065	-
npn current gain	β_{npn} (= I_C/I_B)	$V_{CE}=3V$ $I_B=50\mu A$	8	13	18	-
Critical rate of Rise voltage	dv/dt		1000			V/us

