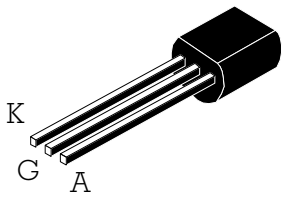


## SENSITIVE GATE SCR

<p><b>TO92 (Plastic)</b></p> 	<p><b>On-State Current</b> 0.8 Amp</p> <p><b>Gate Trigger Current</b> &lt; 200 <math>\mu</math>A</p> <p><b>Off-State Voltage</b> 400 V</p>
<p>This series of <b>Silicon C</b>ontrolled <b>R</b>ectifiers uses a high performance PNP technology.</p> <p>This part is intended for general purpose applications where high gate sensitivity is required.</p>	

**Absolute Maximum Ratings, according to IEC publication No. 134**

SYMBOL	PARAMETER	CONDITIONS	Min.	Max.	Unit
$I_{T(RMS)}$	On-state Current	All Conduction Angle, $T_L = 60^\circ\text{C}$	0.8		A
$I_{T(AV)}$	Average On-state Current	Half Cycle, $\theta = 180^\circ, T_L = 60^\circ\text{C}$	0.5		A
$I_{TSM}$	Non-repetitive On-State Current	Half Cycle, 60 Hz, $T_j = 25^\circ\text{C}$	8		A
$I_{TSM}$	Non-repetitive On-State Current	Half Cycle, 50 Hz, $T_j = 25^\circ\text{C}$	7		A
$I^2t$	Fusing Current	$t = 10\text{ms}$ , Half Cycle	0.24		$\text{A}^2\text{s}$
$V_{GRM}$	Peak Reverse Gate Voltage	$I_{GR} = 10 \mu\text{A}$	8		V
$I_{GM}$	Peak Gate Current	20 $\mu\text{s}$ max.		1	A
$P_{GM}$	Peak Gate Dissipation	20 $\mu\text{s}$ max.		2	W
$P_{G(AV)}$	Gate Dissipation	20ms max.		0.1	W
$T_j$	Operating Temperature		-40	+125	$^\circ\text{C}$
$T_{stg}$	Storage Temperature		-40	+150	$^\circ\text{C}$
$T_{sld}$	Soldering Temperature	1.6 mm from case, 10s max.		260	$^\circ\text{C}$

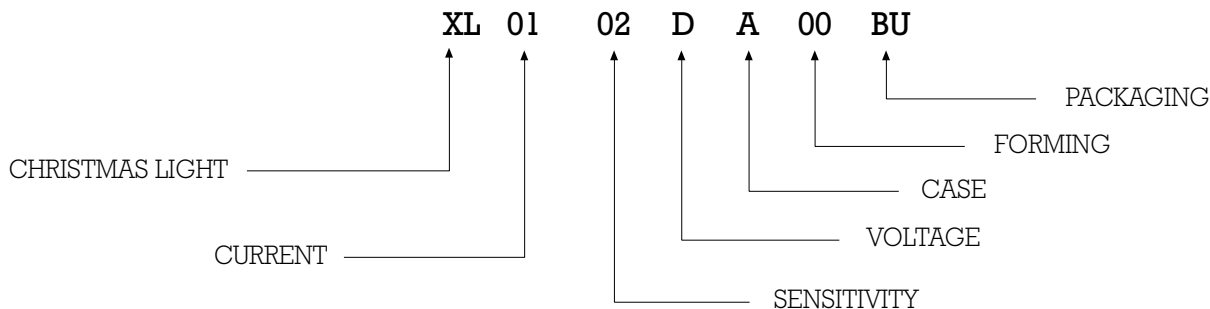
SYMBOL	PARAMETER	CONDITIONS	VOLTAGE	Unit
			D	
$V_{DRM}$	Repetitive Peak Off State Voltage	$R_{CK} = 1 \text{ K}$	400	V

**SENSITIVE GATE SCR**

**Electrical Characteristics**

SYMBOL	PARAMETER	CONDITIONS	SENSITIVITY		Unit
				02	
$I_{GT}$	Gate Trigger Current	$V_D = 12 V_{DC}, R_L = 140 \Omega, T_j = 25^\circ C$	MAX	200	$\mu A$
$I_{DRM}$	Off-State Leakage Current	$V_D = V_{DRM}, R_{GK} = 1K \Omega, T_j = 125^\circ C$ $T_j = 25^\circ C$	MAX	100	$\mu A$
			MAX	1	$\mu A$
$V_{TM}$	On-state Voltage	$I_T = 1.6 \text{ Amp}, t_p = 380 \mu s, T_j = 25^\circ C$	MAX	1.93	V
$V_{GT}$	Gate Trigger Voltage	$V_D = 12 V_{DC}, R_L = 140 \Omega, T_j = 25^\circ C$	MAX	0.8	V
$V_{GD}$	Gate Non-Trigger Voltage	$V_{DRM}, R_{GK} = 1K \Omega, R_L = 3.3K \Omega, T_j = 125^\circ C$	MIN	0.1	V
$I_H$	Holding Current	$I_T = 50 \text{ mA}, R_{GK} = 1K \Omega, T_j = 25^\circ C$	MAX	5	mA
$I_L$	Latching Current	$I_G = 1 \text{ mA}, R_{GK} = 1K \Omega, T_j = 25^\circ C$	MAX	6	mA
dv / dt	Critical Rate of Voltage Rise	$V_D = 0.67 \times V_{DRM}, R_{GK} = 1K \Omega, T_j = 125^\circ C$	TYP	25	V/ $\mu s$
di / dt	Critical Rate of Current Rise	$I_G = 10 \text{ mA}, di_G/dt = 0.1 \text{ A}/\mu s, T_j = 125^\circ C$	MIN	30	A/ $\mu s$
$t_{gd}$	Gate Controlled Delay Time	$I_G = 10 \text{ mA}, di_G/dt = 0.1 \text{ A}/\mu s, T_j = 25^\circ C$ $I_{TM} = 3 \times I_{T(AV)}, V_D = V_{DRM}$	TYP	500	ns
$R_{th(j-l)}$	Thermal Resistance Junction-Leads for DC			80	$^\circ C/W$
$R_{th(j-a)}$	Thermal Resistance Junction-Ambient			150	$^\circ C/W$

**PART NUMBER INFORMATION**



**PACKAGE MECHANICAL DATA** TO92 (Plastic)

REF.	DIMENSIONS		
	Milimeters		
	Min.	Typ.	Max.
A	-	1.5	-
B	4.55	4.6	4.65
C	2.42	2.54	2.66
D	1.15	1.27	1.39
E	4.55	4.6	4.65
F	12.7	14.1	15.5
G	3.55	3.6	3.65
H	-	1.5	-
a	0.38	0.43	0.48
b	0.33	0.38	0.43

Marking: type number  
Weight: 0.2 g