

6367255 MOTOROLA SC (DIODES/OPTO)

34C 38146 D

T-25-13

SILICON THYRISTOR DIE (continued)

**DIE NO. 2C1597**  
**LINE SOURCE — DTL639**



SCR-Silicon Controlled Rectifier

Device assembled from this die type are similar to the following device types:

- 2N1595
- 2N1596
- 2N1597
- 2N1598
- 2N1599

70 mils

70 mils

Backside: Anode

**METALLIZATION —**

Top ..... Al

Back ..... Au

**GOLD THICKNESS ..... 9000 Å**

**DIE THICKNESS ..... 8 ± 2 mils**

**BONDING PAD SIZE —**

Cathode ..... 35x35 mils

Gate ..... 13x18 mils

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**ELECTRICAL CHARACTERISTICS** ( $T_A = 25^\circ\text{C}$ , Note 1)

Parameter	Test Conditions	Min	Max	Unit
$I_{\text{DRM}}$	$V_D = 200 \text{ Vdc}$	—	20	$\mu\text{Adc}$
$I_{\text{RRM}}$	$V_R = 200 \text{ Vdc}$	—	20	$\mu\text{Adc}$
$I_{\text{GT}}$	$V_D = 12 \text{ Vdc}, R_L = 24 \Omega$	—	10	$\text{mAdc}$
$I_H$	$V_D = 12 \text{ Vdc}, I_{\text{TM}} = 200 \text{ mAdc}$	—	10	$\text{mAdc}$
$V_{\text{GT}}$	$V_D = 12 \text{ Vdc}, R_L = 24 \Omega$	—	1.5	Vdc

- NOTES:
1. Because of the limitations of probe testing, only dc parameters are tested. These parameters must be measured using pulse techniques: pulse width  $\leq 300 \mu\text{s}$ , duty cycle  $\leq 2\%$ .
  2. Detailed device characteristics are available from your Motorola sales representative.