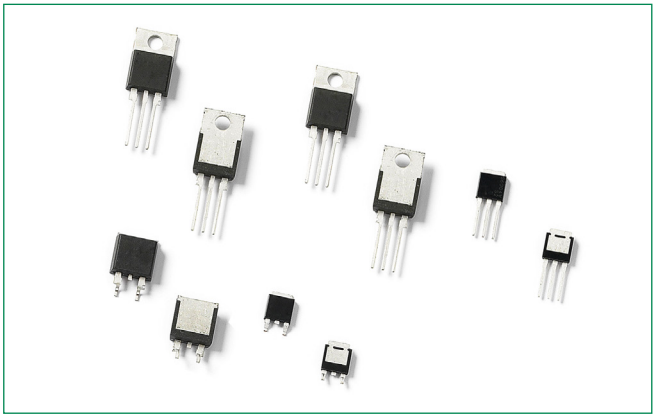
# Thyristors
## 8 Amp Sensitive & Standard SCRs

## Sxx08xSx & Sxx08x Series



## Description

This Sxx08x SCR series is ideal for uni-directional switch applications such as phase control, heating, motor speed controls, converters/rectifiers and capacitive discharge ignitions.

These SCRs have a low gate current trigger level of 0.2 to 15 mA at approximately 1.5V, with a sensitive version of this series having a gate trigger current less than 500µA. The sensitive gate SCR version is easily triggered by sense coils, proximity switches, and microprocessors.

## Agency Approval

| Agency | Agency File Number |
|---|---|
| | E71639* |

* - L Package Only

## Features & Benefits

- Halogen-free and RoHS-compliant
- Glass – passivated junctions
- Voltage capability up to 1000 V
- Surge capability up to 100 A at 60 Hz half cycle
- L - Package is UL Recognized for 2500Vrms

## Main Features

| Symbol | Value | Unit |
|---|---|---|
| $I_{T(RMS)}$ | 8 | A |
| $V_{DRM}/V_{RRM}$ | 400 to 1000 | V |
| $I_{GT}$ | 0.2 to 15 | mA |

## Applications

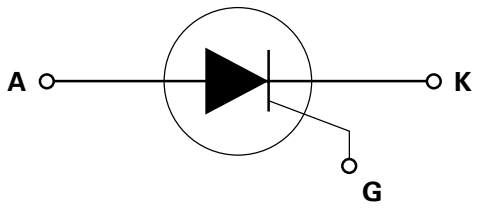
Typical applications are capacitive discharge systems for strobe lights, nailers, staplers and gas engine ignition. Also AC control & rectification for power tools, home/brown goods, white goods appliances and 2-wheeler rectifier/ battery regulators.

Internally constructed isolated packages are offered for ease of heat sinking with highest isolation voltage.

## Additional Information

**Datasheet** | **Resources** | **Samples**

## Schematic Symbol



## Absolute Maximum Ratings — Sensitive SCRs

| Symbol | Parameter | Test Conditions | | Value | Unit |
|---|---|---|---|---|---|
| $I_{T(RMS)}$ | RMS on-state current | Sxx08LSy | $T_C$ = 80°C | 8 | A |
| | | Sxx08RSy/Sxx08NSy<br>Sxx08DSy<br>Sxx08VSy | $T_C$ = 95°C | | |
| $I_{T(AV)}$ | Average on-state current | Sxx08LSy | $T_C$ = 80°C | 5.1 | A |
| | | Sxx08RSy/Sxx08NSy<br>Sxx08DSy<br>Sxx08VSy | $T_C$ = 95°C | | |
| $I_{TSM}$ | Peak non-repetitive surge current | single half cycle; f = 50Hz;<br>$T_J$ (initial) = 25°C | | 83 | A |
| | | single half cycle; f = 60Hz;<br>$T_J$ (initial) = 25°C | | 100 | |
| $I^2t$ | $I^2t$ Value for fusing | $t_p$ = 8.3 ms | | 41 | $A^2s$ |
| di/dt | Critical rate of rise of on-state current | f = 60 Hz ; $T_J$ = 110°C | | 70 | A/µs |
| $I_{GTM}$ | Peak gate current | $T_J$ = 110°C | | 1.6 | A |
| $P_{G(AV)}$ | Average gate power dissipation | $T_J$ = 110°C | | 0.4 | W |
| $T_{stg}$ | Storage temperature range | | | -40 to 150 | °C |
| $T_J$ | Operating junction temperature range | | | -40 to 110 | °C |

**Note:** xx = voltage, y = sensitivity

## Absolute Maximum Ratings — Standard SCRs

| Symbol | Parameter | Test Conditions | | Value | Unit |
|---|---|---|---|---|---|
| $I_{T(RMS)}$ | RMS on-state current | Sxx08L | $T_C$ = 100°C | 8 | A |
| | | Sxx08R/Sxx08N<br>Sxx08D<br>Sxx08V | $T_C$ = 110°C | | |
| $I_{T(AV)}$ | Average on-state current | Sxx08L | $T_C$ = 100°C | 5.1 | A |
| | | Sxx08R/Sxx08N<br>Sxx08D<br>Sxx08V | $T_C$ = 110°C | | |
| $I_{TSM}$ | Peak non-repetitive surge current | single half cycle; f = 50Hz;<br>$T_J$ (initial) = 25°C | | 83 | A |
| | | single half cycle; f = 60Hz;<br>$T_J$ (initial) = 25°C | | 100 | |
| $I^2t$ | $I^2t$ Value for fusing | $t_p$ = 8.3 ms | | 41 | $A^2s$ |
| di/dt | Critical rate-of-rise of on-state current | f = 60 Hz $T_J$ = 125°C | | 100 | A/µs |
| $I_{GM}$ | Peak gate current | $T_J$ = 125°C | | 2 | A |
| $P_{G(AV)}$ | Average gate power dissipation | $T_J$ = 125°C | | 0.5 | W |
| $T_{stg}$ | Storage temperature range | | | -40 to 150 | °C |
| $T_J$ | Operating junction temperature range | | | -40 to 125 | °C |

**Note:** xx = voltage

## Electrical Characteristics ($T_J$ = 25°C, unless otherwise specified) – Sensitive SCRs

| Symbol | Test Conditions | | Value | | | | Unit |
|---|---|---|---|---|---|---|---|
| | | | Sxx08xS1 | Sxx08xS2 | Sxx08xS3 | Sxx08x4 | |
| $I_{GT}$ | $V_D$ = 6V $R_L$ = 100 Ω | MAX. | 50 | 200 | 500 | 100 | µA |
| $V_{GT}$ | $V_D$ = 6V $R_L$ = 100 Ω | MAX. | 0.8 | | | | V |
| dv/dt | $V_D = V_{DRM}$; $R_{GK}$ = 1kΩ; $T_J$ = 110°C | TYP. | 8 | | | | V/µs |
| $V_{GD}$ | $V_D = V_{DRM}$ $R_L$ = 3.3 kΩ $T_J$ = 110°C | MIN. | 0.2 | | | | V |
| $V_{GRM}$ | $I_{GR}$ = 10µA | MIN. | 6 | | | | V |
| $I_H$ | $I_T$ = 20mA (initial) | MAX. | 4 | 6 | 8 | 5 | mA |
| $t_q$ | $I_T$=2A; $t_p$=50µs; dv/dt=5V/µs; di/dt=-30A/µs | MAX. | 75 | 50 | 45 | 60 | µs |
| $t_{gt}$ | $I_G$ = 2 x $I_{GT}$ PW = 15µs $I_T$ = 12A | TYP. | 3 | 4 | 5 | 4 | µs |

**Note:** xx = voltage x = package

## Electrical Characteristics ($T_J$ = 25°C, unless otherwise specified) – Standard SCRs

| Symbol | Test Conditions | | | Value | Unit |
|---|---|---|---|---|---|
| | | | | Sxx08x | |
| $I_{GT}$ | $V_D$ = 12V $R_L$ = 60 Ω | | MAX. | 15 | mA |
| $V_{GT}$ | $V_D$ = 12V $R_L$ = 60 Ω | | MAX. | 1.5 | V |
| dv/dt | $V_D = V_{DRM}$; gate open; $T_J$ = 100°C | 400V | MIN. | 350 | V/µs |
| | | 600V | | 300 | |
| | | 800V | | 250 | |
| | | 1000V | | 100 | |
| | $V_D = V_{DRM}$; gate open; $T_J$ = 125°C | 400V | | 250 | |
| | | 600V | | 225 | |
| | | 800V | | 200 | |
| $V_{GD}$ | $V_D = V_{DRM}$ $R_L$ = 3.3 kΩ $T_J$ = 125°C | | MIN. | 0.2 | V |
| $I_H$ | $I_T$ = 200mA (initial) | | MAX. | 30 | mA |
| $t_q$ | $I_T$=2A; $t_p$=50µs; dv/dt=5V/µs; di/dt=-30A/µs | | MAX. | 35 | µs |
| $t_{gt}$ | $I_G$ = 2 x $I_{GT}$ PW = 15µs $I_T$ = 16A | | TYP. | 2 | µs |

**Note:** xx = voltage x = package

## Static Characteristics

| Symbol | Test Conditions | | | | | Value | Unit |
|---|---|---|---|---|---|---|---|
| $V_{TM}$ | $I_T$ = 16A; $t_p$ = 380 µs | | | | MAX. | 1.6 | V |
| $I_{DRM}$ / $I_{RRM}$ | $V_{DRM} = V_{RRM}$ | Sxx08xyy | $T_J$ = 25°C | 400 - 600V | MAX. | 5 | µA |
| | | | $T_J$ = 110°C | 400 - 600V | | 250 | |
| | | Sxx08x | $T_J$ = 25°C | 400 - 800V | | 10 | |
| | | | | 1000V | | 20 | |
| | | | $T_J$ = 100°C | 400 - 800V | | 200 | |
| | | | | 1000V | | 3000 | |
| | | | $T_J$ = 125°C | 400 - 800V | | 500 | |

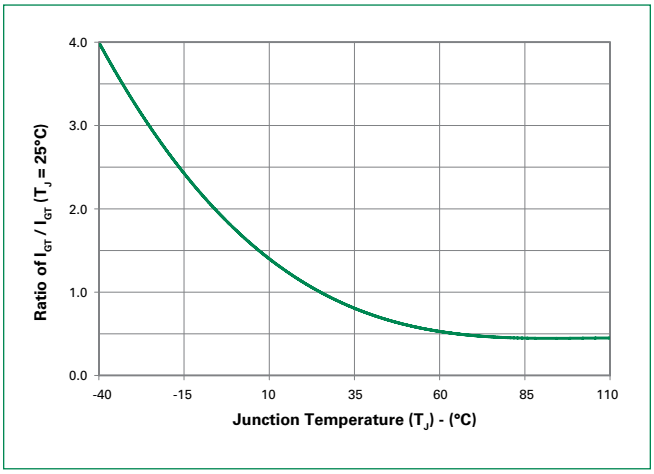
**Note:** xx = voltage, x = package, yy = sensitivity

## Thermal Resistances

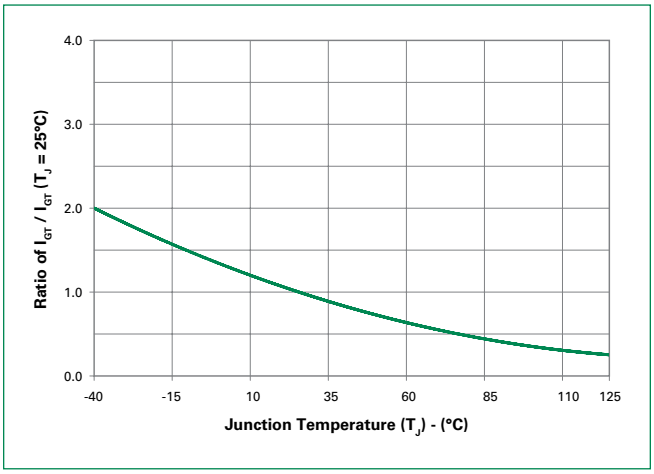
| Symbol | Parameter | | Value | Unit |
|---|---|---|---|---|
| $R_{\theta(J-C)}$ | Junction to case (AC) | Sxx08RSy / Sxx08NSy | 1.8 | °C/W |
| | | Sxx08LSy | 3.4 | |
| | | Sxx08VSy | 2.1 | |
| | | Sxx08DSy | 1.5 | |
| | | Sxx08R / S xx08N | 1.8 | |
| | | Sxx08L | 3.4 | |
| | | Sxx08V | 2.0 | |
| | | Sxx08D | 1.5 | |
| $R_{\theta(J-A)}$ | Junction to ambient | Sxx08RSy | 40 | °C/W |
| | | Sxx08LSy | 65 | |
| | | Sxx08VSy | 85 | |
| | | Sxx08R | 40 | |
| | | Sxx08L | 50 | |
| | | Sxx08V | 70 | |

**Note:** xx = voltage, y = sensitivity

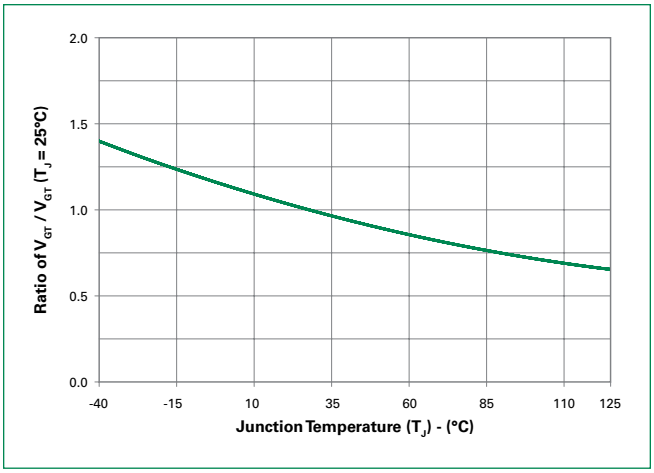
## Figure 1: Normalized DC Gate Trigger Current vs. Junction Temperature (Sensitive SCR)



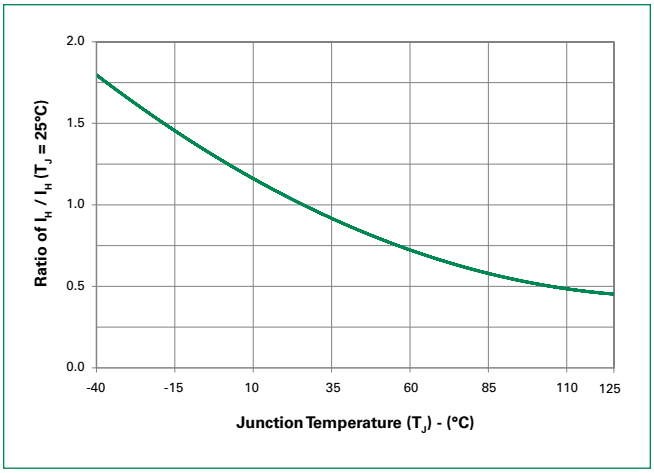

## Figure 2: Normalized DC Gate Trigger Current vs. Junction Temperature (Standard SCR)



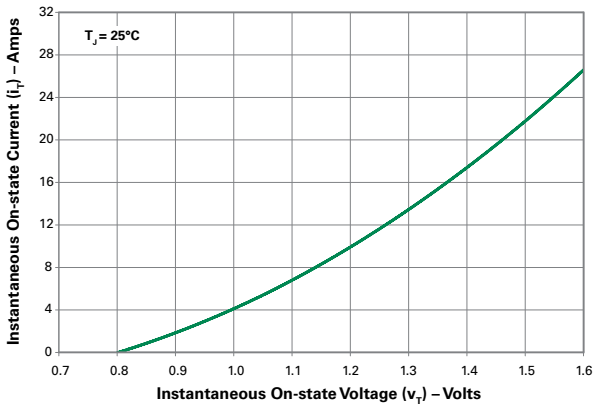

## Figure 3: Normalized DC Gate Trigger Voltage vs. Junction Temperature



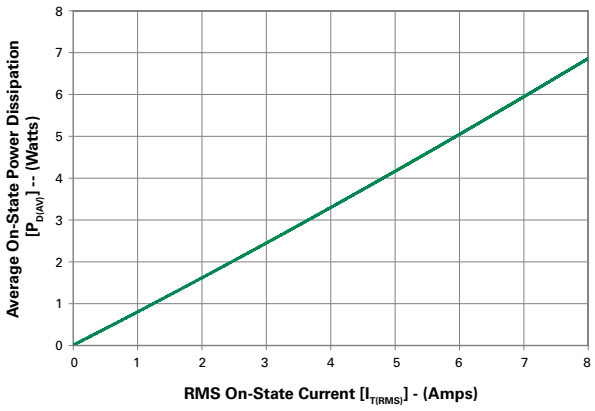

## Figure 4: Normalized DC Holding Current vs. Junction Temperature



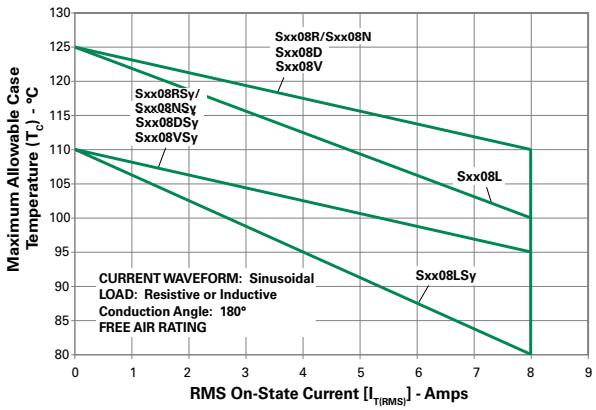
## Figure 5: On-State Current vs. On-State Voltage (Typical)



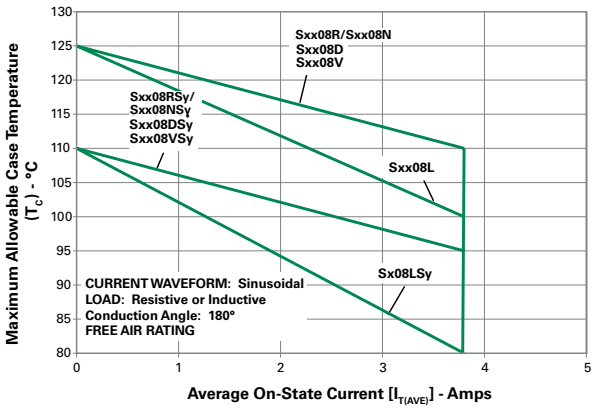

## Figure 6: Power Dissipation (Typical) vs. RMS On-State Current



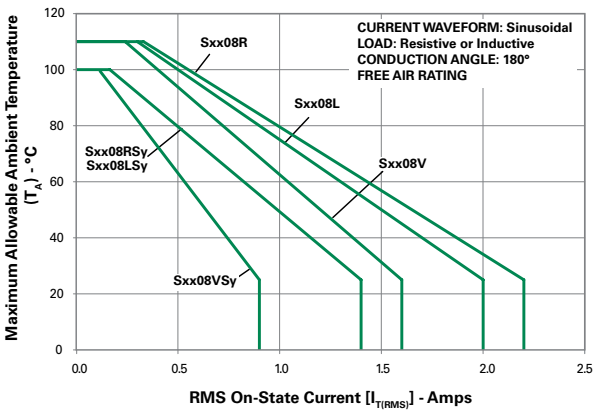

## Figure 7: Maximum Allowable Case Temperature vs. RMS On-State Current



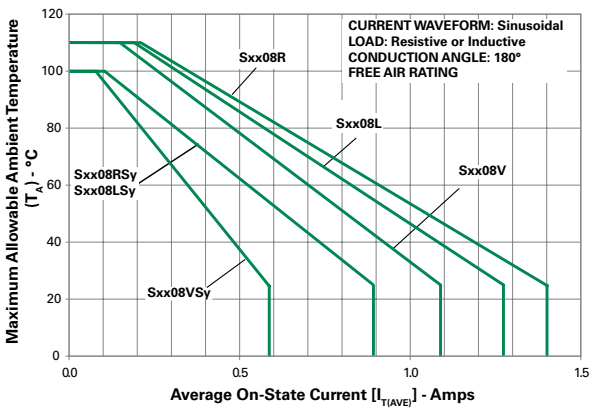

## Figure 8: Maximum Allowable Case Temperature vs. Average On-State Current




## Figure 9: Maximum Allowable Ambient Temperature vs. RMS On-State Current

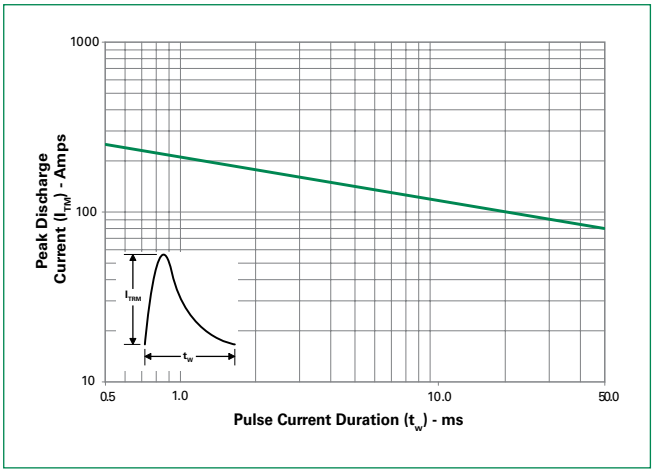



## Figure 10: Maximum Allowable Ambient Temperature vs. Average On-State Current

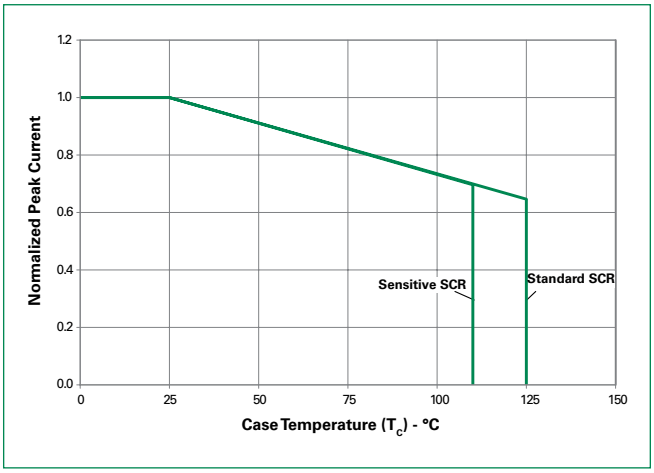



**Note:** xx = voltage, y = sensitivity

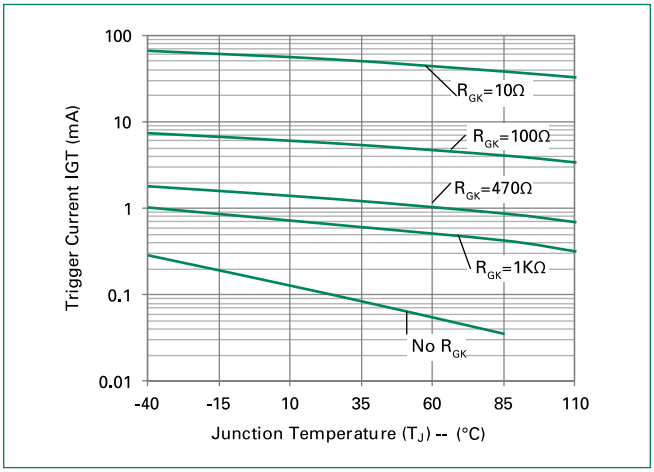
## Figure 11: Peak Capacitor Discharge Current



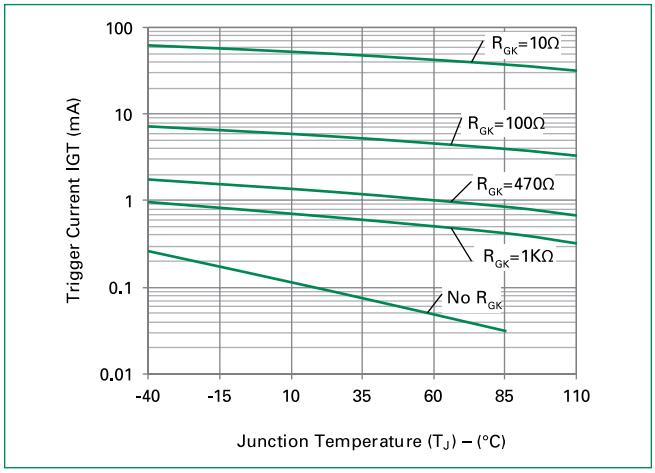

## Figure 12: Peak Capacitor Discharge Current Derating



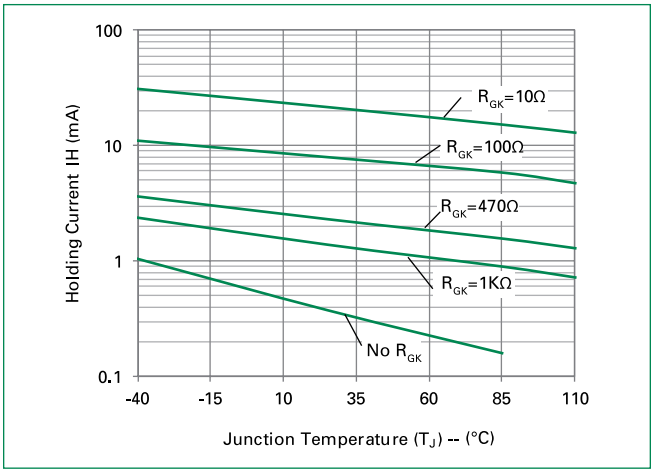

## Figure 13-1: Typical DC Gate Trigger Current with $R_{GK}$ vs. Junction Temperature for S6008xS2



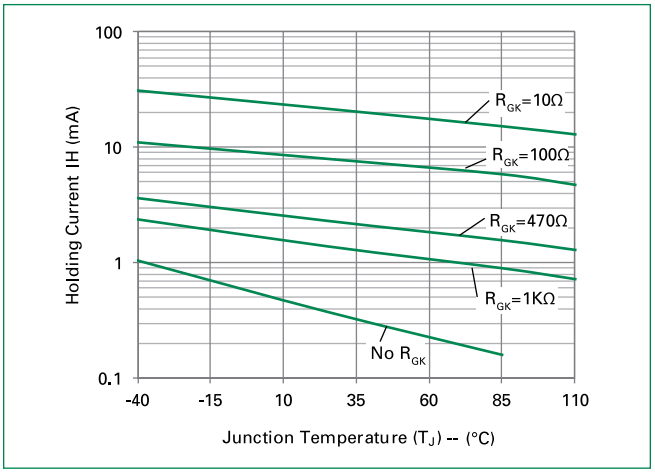

## Figure 13-2: Typical DC Gate Trigger Current with $R_{GK}$ vs. Junction Temperature for S6008xS3



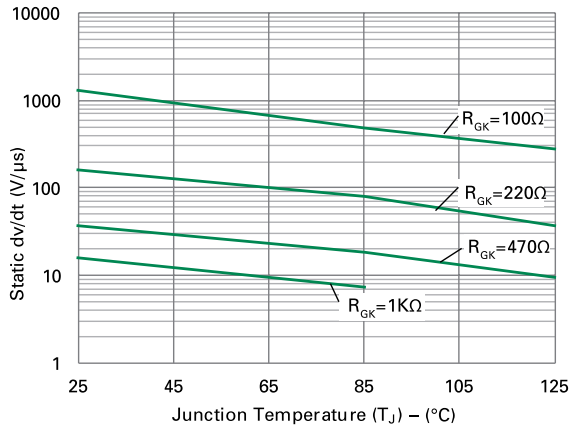

## Figure 14-1: Typical DC Holding Current with $R_{GK}$ vs. Junction Temperature for S6008xS2



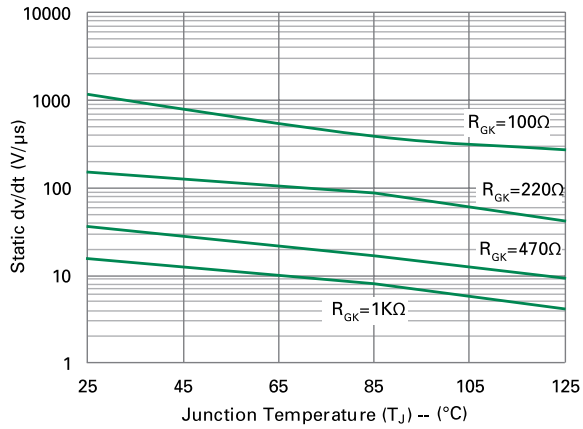

## Figure 14-1: Typical DC Holding Current with $R_{GK}$ vs. Junction Temperature for S6008xS3



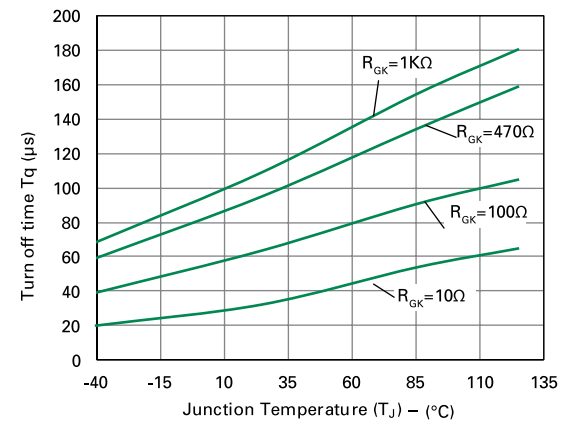
## Figure 15-1: Typical Static dv/dt with $R_{GK}$ vs. Junction Temperature for S6008xS2



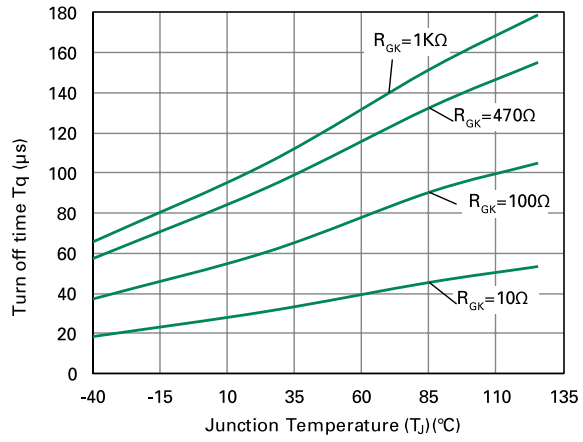

## Figure 15-2: Typical Static dv/dt with $R_{GK}$ vs. Junction Temperature for S6008xS3



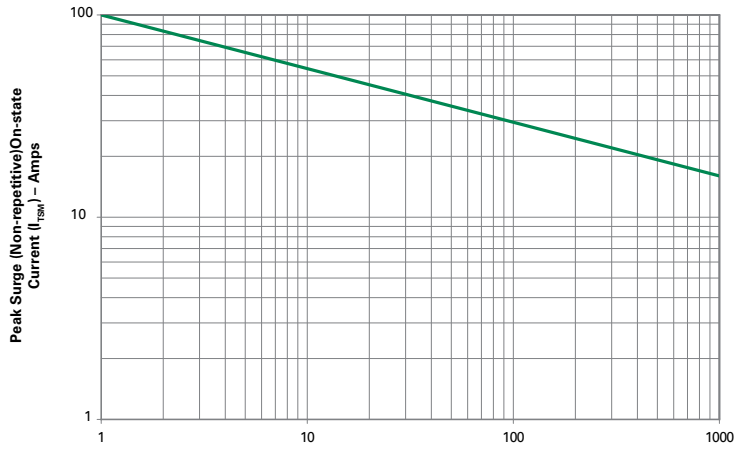

## Figure 16-1: Typical turn off time with $R_{GK}$ vs. Junction Temperature for S6008xS2




## Figure 16-2: Typical DC Gate Trigger Current with $R_{GK}$ vs. Junction Temperature for S6008xS3




## Figure 17: Surge Peak On-State Current vs. Number of Cycles

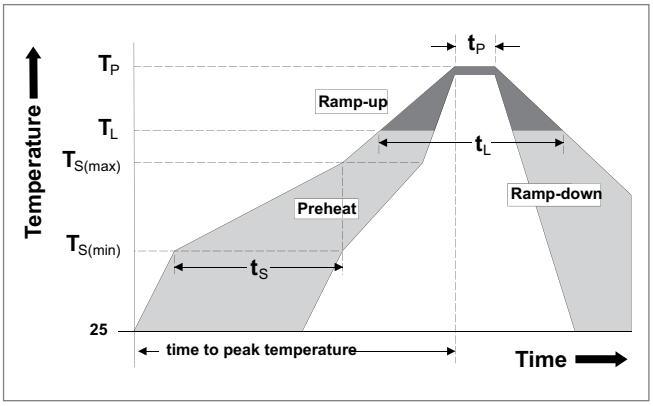



**SUPPLY FREQUENCY:** 60 Hz Sinusoidal
**LOAD:** Resistive
**RMS On-State Current: [$I_{T(RMS)}$]:** Maximum Rated Value at Specified Case Temperature

**Notes:**
1. Gate control may be lost during and immediately following surge current interval.
2. Overload may not be repeated until junction temperature has returned to steady-state rated value.

## Soldering Parameters

| | | |
|---|---|---|
| **Reflow Condition** | | Pb – Free assembly |
| **Pre Heat** | **- Temperature Min ($T_{s(min)}$)** | 150°C |
| | **- Temperature Max ($T_{s(max)}$)** | 200°C |
| | **- Time (min to max) ($t_s$)** | 60 – 180 secs |
| **Average ramp up rate (Liquidus Temp) ($T_L$) to peak** | | 5°C/second max |
| **$T_{S(max)}$ to $T_L$ - Ramp-up Rate** | | 5°C/second max |
| **Reflow** | **- Temperature ($T_L$) (Liquidus)** | 217°C |
| | **- Temperature ($t_L$)** | 60 – 150 seconds |
| **Peak Temperature ($T_P$)** | | $260^{+0/-5}$ °C |
| **Time within 5°C of actual peak Temperature ($t_p$)** | | 20 – 40 seconds |
| **Ramp-down Rate** | | 5°C/second max |
| **Time 25°C to peak Temperature ($T_P$)** | | 8 minutes Max. |
| **Do not exceed** | | 280°C |




## Physical Specifications

| | |
|---|---|
| **Terminal Finish** | 100% Matte Tin-plated |
| **Body Material** | UL recognized epoxy meeting flammability rating 94V-0 |
| **Lead Material** | Copper Alloy |

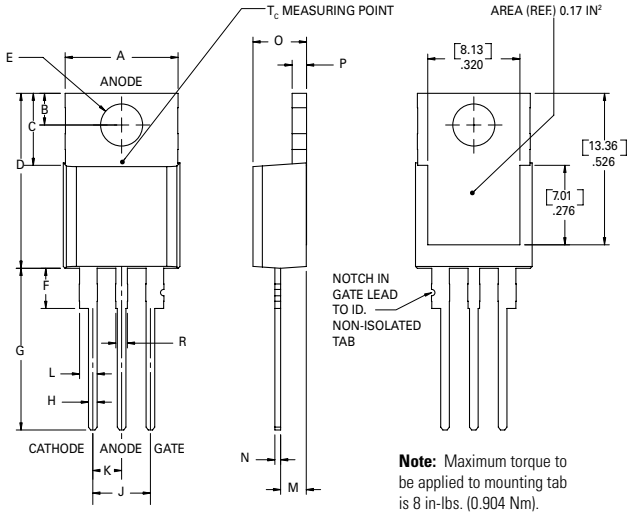
## Design Considerations

Careful selection of the correct component for the application's operating parameters and environment will go a long way toward extending the operating life of the Thyristor. Good design practice should limit the maximum continuous current through the main terminals to 75% of the component rating. Other ways to ensure long life for a power discrete semiconductor are proper heat sinking and selection of voltage ratings for worst case conditions. Overheating, overvoltage (including dv/dt), and surge currents are the main killers of semiconductors. Correct mounting, soldering, and forming of the leads also help protect against component damage.

## Environmental Specifications

| Test | Specifications and Conditions |
|---|---|
| **AC Blocking** | MIL-STD-750, M-1040, Cond A Applied Peak AC voltage @ 125°C for 1008 hours |
| **Temperature Cycling** | MIL-STD-750, M-1051, 100 cycles; -40°C to +150°C; 15-min dwell-time |
| **Temperature/Humidity** | EIA / JEDEC, JESD22-A101 1008 hours; 320V - DC: 85°C; 85% rel humidity |
| **High Temp Storage** | MIL-STD-750, M-1031, 1008 hours; 150°C |
| **Low-Temp Storage** | 1008 hours; -40°C |
| **Resistance to Solder Heat** | MIL-STD-750 Method 2031 |
| **Solderability** | ANSI/J-STD-002, category 3, Test A |
| **Lead Bend** | MIL-STD-750, M-2036 Cond E |

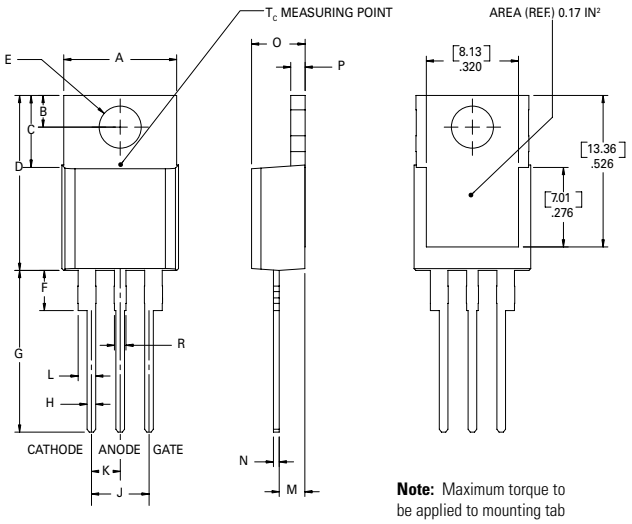
## Dimensions — TO-220AB (R-Package) — Non-Isolated Mounting Tab Common with Center Lead




**Note:** Maximum torque to be applied to mounting tab is 8 in-lbs. (0.904 Nm).

| Dimension | Inches | | Millimeters | |
|---|---|---|---|---|
| | Min | Max | Min | Max |
| A | 0.380 | 0.420 | 9.65 | 10.67 |
| B | 0.105 | 0.115 | 2.67 | 2.92 |
| C | 0.230 | 0.250 | 5.84 | 6.35 |
| D | 0.590 | 0.620 | 14.99 | 15.75 |
| E | 0.142 | 0.147 | 3.61 | 3.73 |
| F | 0.110 | 0.130 | 2.79 | 3.30 |
| G | 0.540 | 0.575 | 13.72 | 14.61 |
| H | 0.025 | 0.035 | 0.64 | 0.89 |
| J | 0.195 | 0.205 | 4.95 | 5.21 |
| K | 0.095 | 0.105 | 2.41 | 2.67 |
| L | 0.060 | 0.075 | 1.52 | 1.91 |
| M | 0.085 | 0.095 | 2.16 | 2.41 |
| N | 0.018 | 0.024 | 0.46 | 0.61 |
| O | 0.178 | 0.188 | 4.52 | 4.78 |
| P | 0.045 | 0.060 | 1.14 | 1.52 |
| R | 0.038 | 0.048 | 0.97 | 1.22 |

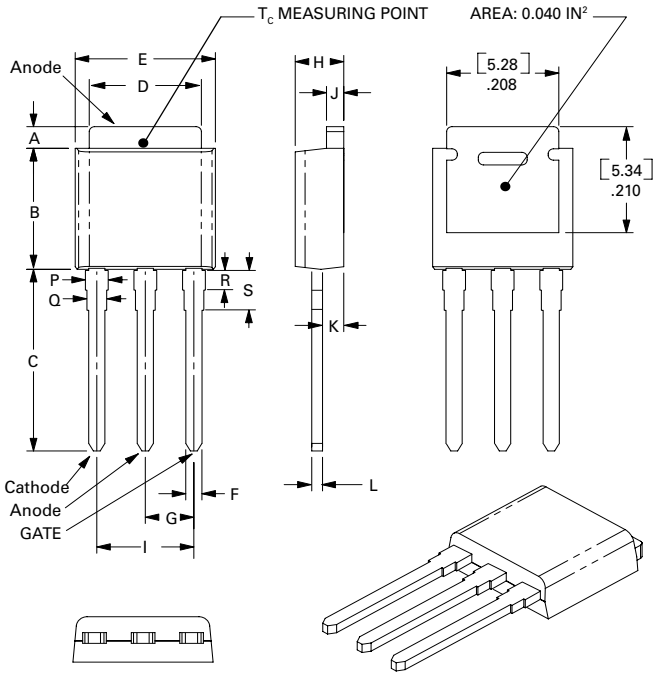
## Dimensions — TO-220AB (L-Package) — Isolated Mounting Tab




**Note:** Maximum torque to be applied to mounting tab is 8 in-lbs. (0.904 Nm).

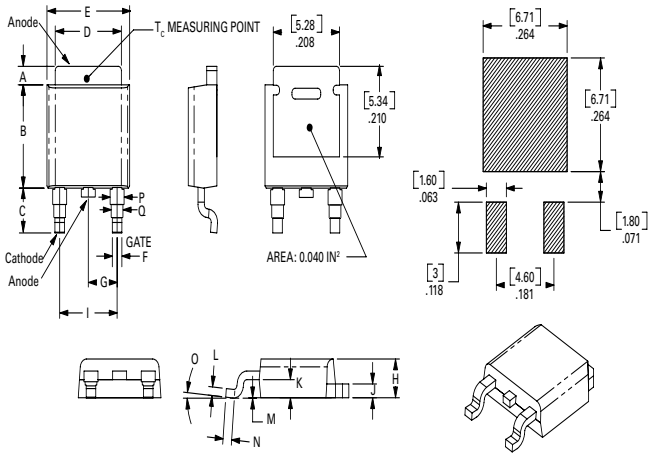
| Dimension | Inches | | Millimeters | |
|---|---|---|---|---|
| | Min | Max | Min | Max |
| A | 0.380 | 0.420 | 9.65 | 10.67 |
| B | 0.105 | 0.115 | 2.67 | 2.92 |
| C | 0.230 | 0.250 | 5.84 | 6.35 |
| D | 0.590 | 0.620 | 14.99 | 15.75 |
| E | 0.142 | 0.147 | 3.61 | 3.73 |
| F | 0.110 | 0.130 | 2.79 | 3.30 |
| G | 0.540 | 0.575 | 13.72 | 14.61 |
| H | 0.025 | 0.035 | 0.64 | 0.89 |
| J | 0.195 | 0.205 | 4.95 | 5.21 |
| K | 0.095 | 0.105 | 2.41 | 2.67 |
| L | 0.060 | 0.075 | 1.52 | 1.91 |
| M | 0.085 | 0.095 | 2.16 | 2.41 |
| N | 0.018 | 0.024 | 0.46 | 0.61 |
| O | 0.178 | 0.188 | 4.52 | 4.78 |
| P | 0.045 | 0.060 | 1.14 | 1.52 |
| R | 0.038 | 0.048 | 0.97 | 1.22 |

## Dimensions — TO-251AA (V/I-Package) — V/I-PAK Through Hole




| Dimension | Inches | | | Millimeters | | |
|---|---|---|---|---|---|---|
| | Min | Typ | Max | Min | Typ | Max |
| A | 0.037 | 0.040 | 0.043 | 0.94 | 1.01 | 1.09 |
| B | 0.235 | 0.242 | 0.245 | 5.97 | 6.15 | 6.22 |
| C | 0.350 | 0.361 | 0.375 | 8.89 | 9.18 | 9.53 |
| D | 0.205 | 0.208 | 0.213 | 5.21 | 5.29 | 5.41 |
| E | 0.255 | 0.262 | 0.265 | 6.48 | 6.66 | 6.73 |
| F | 0.027 | 0.031 | 0.033 | 0.69 | 0.80 | 0.84 |
| G | 0.087 | 0.090 | 0.093 | 2.21 | 2.28 | 2.36 |
| H | 0.085 | 0.092 | 0.095 | 2.16 | 2.34 | 2.41 |
| I | 0.176 | 0.180 | 0.184 | 4.47 | 4.57 | 4.67 |
| J | 0.018 | 0.020 | 0.023 | 0.46 | 0.51 | 0.58 |
| K | 0.035 | 0.037 | 0.039 | 0.90 | 0.95 | 1.00 |
| L | 0.018 | 0.020 | 0.023 | 0.46 | 0.52 | 0.58 |
| P | 0.042 | 0.047 | 0.052 | 1.06 | 1.20 | 1.32 |
| Q | 0.034 | 0.039 | 0.044 | 0.86 | 1.00 | 1.11 |
| R | 0.034 | 0.039 | 0.044 | 0.86 | 1.00 | 1.11 |
| S | 0.074 | 0.079 | 0.084 | 1.86 | 2.00 | 2.11 |

## Dimensions — TO-252AA (D-Package) — D-PAK Surface Mount




| Dimension | Inches | | | Millimeters | | |
|---|---|---|---|---|---|---|
| | Min | Typ | Max | Min | Typ | Max |
| A | 0.037 | 0.040 | 0.043 | 0.94 | 1.01 | 1.09 |
| B | 0.235 | 0.243 | 0.245 | 5.97 | 6.16 | 6.22 |
| C | 0.106 | 0.108 | 0.113 | 2.69 | 2.74 | 2.87 |
| D | 0.205 | 0.208 | 0.213 | 5.21 | 5.29 | 5.41 |
| E | 0.255 | 0.262 | 0.265 | 6.48 | 6.65 | 6.73 |
| F | 0.027 | 0.031 | 0.033 | 0.69 | 0.80 | 0.84 |
| G | 0.087 | 0.090 | 0.093 | 2.21 | 2.28 | 2.36 |
| H | 0.085 | 0.092 | 0.095 | 2.16 | 2.33 | 2.41 |
| I | 0.176 | 0.179 | 0.184 | 4.47 | 4.55 | 4.67 |
| J | 0.018 | 0.020 | 0.023 | 0.46 | 0.51 | 0.58 |
| K | 0.035 | 0.037 | 0.039 | 0.90 | 0.95 | 1.00 |
| L | 0.018 | 0.020 | 0.023 | 0.46 | 0.51 | 0.58 |
| M | 0.000 | 0.000 | 0.004 | 0.00 | 0.00 | 0.10 |
| N | 0.021 | 0.026 | 0.027 | 0.53 | 0.67 | 0.69 |
| O | 0° | 0° | 5° | 0° | 0° | 5° |
| P | 0.042 | 0.047 | 0.052 | 1.06 | 1.20 | 1.32 |
| Q | 0.034 | 0.039 | 0.044 | 0.86 | 1.00 | 1.11 |

# Thyristors
## 8 Amp Sensitive & Standard SCRs

## Product Selector

| Part Number | Voltage | | | | Gate Sensitivity | Type | Package |
|---|---|---|---|---|---|---|---|
| | 400V | 600V | 800V | 1000V | | | |
| Sxx08RS2 | X | X | - | - | 0.2mA | Sensitive SCR | TO-220R |
| Sxx08LS2 | X | X | - | - | 0.2mA | Sensitive SCR | TO-220L |
| Sxx08VS2 | X | X | - | - | 0.2mA | Sensitive SCR | TO-251 |
| Sxx08DS2 | X | X | - | - | 0.2mA | Sensitive SCR | TO-252 |
| Sxx08RS3 | X | X | - | - | 0.5mA | Sensitive SCR | TO-220R |
| Sxx08LS3 | X | X | - | - | 0.5mA | Sensitive SCR | TO-220L |
| Sxx08VS3 | X | X | - | - | 0.5mA | Sensitive SCR | TO-251 |
| Sxx08DS3 | X | X | - | - | 0.5mA | Sensitive SCR | TO-252 |
| Sxx08R | X | X | X | X | 15mA | Standard SCR | TO-220R |
| Sxx08L | X | X | X | X | 15mA | Standard SCR | TO-220L |
| Sxx08V | X | X | X | X | 15mA | Standard SCR | TO-251 |
| Sxx08D | X | X | X | X | 15mA | Standard SCR | TO-252 |
| Sxx08NS2 | X | X | - | - | 0.2mA | Sensitive SCR | TO-263 |
| Sxx08NS3 | X | X | - | - | 0.5mA | Sensitive SCR | TO-263 |
| Sxx08N | X | X | X | X | 15mA | Standard SCR | TO-263 |
| Sxx08DS1 | - | X | - | - | 50µA | Sensitive SCR | TO-252 |
| Sxx08DS4 | - | X | - | - | 100µA | Sensitive SCR | TO-252 |

**Note:** xx = Voltage/10

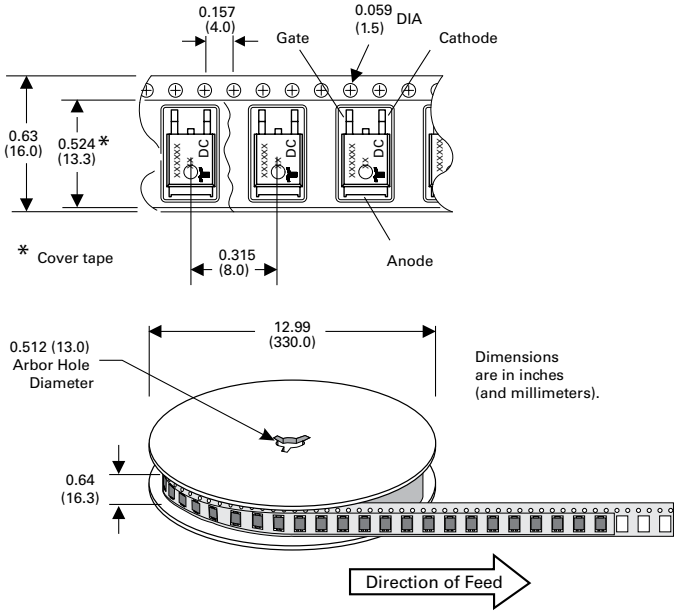
## Packing Options

| Part Number | Marking | Weight | Packing Mode | Base Quantity |
|---|---|---|---|---|
| Sxx08L/RyyTP | Sxx08L/Ryy | 2.2 g | Tube | 1000 (50 per tube) |
| Sxx08DyyTP | Sxx08Dyy | 0.3 g | Tube | 750 (75 per tube) |
| Sxx08DyyRP | Sxx08Dyy | 0.3 g | Embossed Carrier | 2500 |
| Sxx08VyyTP | Sxx08Vyy | 0.4 g | Tube | 750 (75 per tube) |
| Sxx08L/RTP | Sxx08L/R | 2.2 g | Tube | 1000 (50 per tube) |
| Sxx08DTP | Sxx08D | 0.3 g | Tube | 750 (75 per tube) |
| Sxx08DRP | Sxx08D | 0.3 g | Embossed Carrier | 2500 |
| Sxx08NyyTP | Sxx08Nyy | 1.6g | Tube | 1000 (50 per tube) |
| Sxx08NyyRP | Sxx08Nyy | 1.6g | Embossed Carrier | 500 |
| Sxx08NTP | Sxx08N | 1.6g | Tube | 1000 (50 per tube) |
| Sxx08NRP | Sxx08N | 1.6g | Embossed Carrier | 500 |
| Sxx08VRP | Sxx08V | 0.4 g | Tube | 750 (75 per tube) |

**Note:** xx = Voltage/10; yy = Sensitivity

## TO-252 Embossed Carrier Reel Pack (RP) Specifications

### Meets all EIA-481-2 Standards




## Part Numbering System

**S 60 08 L S2 56**

**COMPONENT TYPE**
S: SCR

**VOLTAGE RATING**
40: 400V
60: 600V
80: 800V
K0: 1000V

**CURRENT RATING**
08: 8A

**PACKAGE TYPE**
L: TO-220 Isolated
R: TO-220 Non-Isolated
V: TO-251 (V/I-Pak)
D: TO-252 (D-Pak)
N: TO-263 ($D^2PAK$)

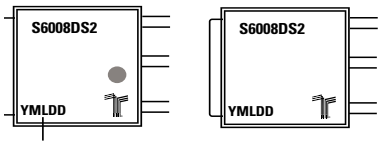
**SENSITIVITY & TYPE**

| Sensitive SCR: | Standard SCR: |
|---|---|
| S1: 50µA | (blank): 15mA |
| S2: 200µA | |
| S3: 500µA | |
| S4: 100µA | |

**LEAD FORM DIMENSIONS**
xx: Lead Form Option

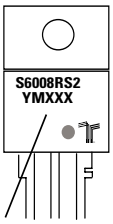
## Part Marking System

**TO-251AA - (V Package)**
**TO-252AA - (D Package)**




Date Code Marking
Y:Year Code
M: Month Code
L: Location Code
DD: Calendar Code

**TO-263 AA - (N Package)**
**TO-220 AB - (L and R Package)**




Date Code Marking
Y:Year Code
M: Month Code
XXX: Lot Trace Code

单击下面可查看定价，库存，交付和生命周期等信息

>>Littelfuse(美国力特)