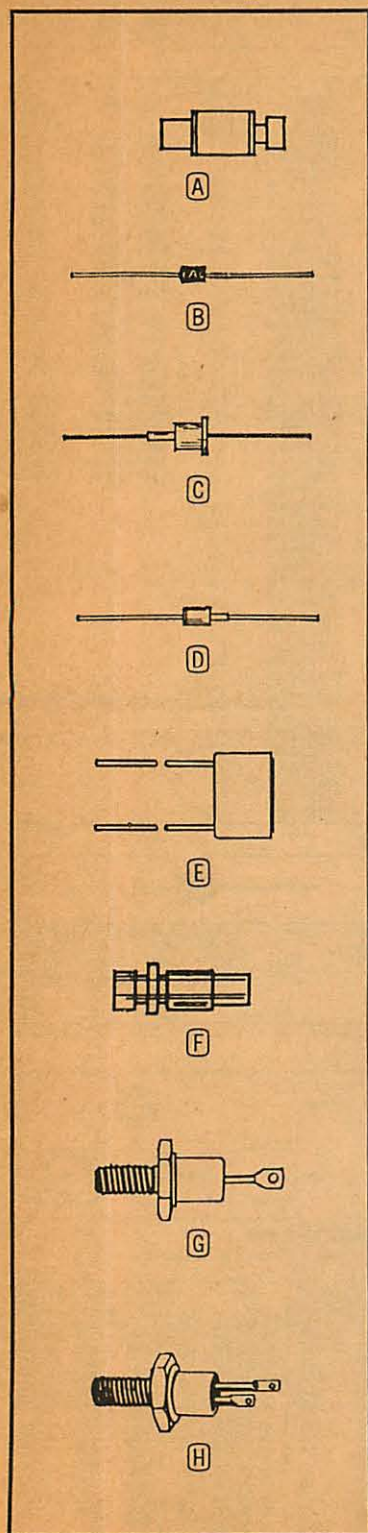




**SARKES
TARZIAN**

SILICON AVALANCHE RECTIFIERS

All Sarkes Tarzian silicon rectifiers are now designed so avalanche current flows through junction and not across surface when high voltage is applied. Cycles in and out of avalanche region to full limit of thermal capacity for dissipation of heat losses. Transient voltage failures are virtually eliminated for high reliability. Available from 0.5 amp through 350 amps.



LOW CURRENT RECTIFIERS M SERIES 0.5 AMP (FIG. A)

| S-T No. | JEDEC No. | Max. PIV | Max. RMS Volts | Max. Cur., Amps at 100° C* | | | Net Each, Lots of | | |
|---------|-----------|----------|----------------|----------------------------|-------------|-----------|-------------------|--------|--------|
| | | | | DC Load | Recur. Peak | 4MS Surge | 1-24 | 25-99 | 100 Up |
| 10M | 1N1081 | 100 | 70 | 0.5 | 5.0 | 30 | \$0.60 | \$0.55 | \$0.51 |
| 20M | 1N1082 | 200 | 140 | 0.5 | 5.0 | 30 | .65 | .57 | .53 |
| 30M | 1N1083 | 300 | 210 | 0.5 | 5.0 | 30 | .70 | .61 | .57 |
| 40M | 1N1084 | 400 | 280 | 0.5 | 5.0 | 30 | .75 | .63 | .59 |
| M-500 | 1N1084 | 400 | 280 | 0.5 | 5.0 | 30 | .75 | .63 | .59 |
| 50M | ..... | 500 | 350 | 0.5 | 5.0 | 30 | .80 | .69 | .64 |
| 60M | ..... | 600 | 420 | 0.5 | 5.0 | 30 | .85 | .70 | .66 |

F SERIES 0.75 AMP (FIG. B)

| | | | | | | | | | |
|-----|--------|-----|-----|------|-----|----|--------|--------|-----|
| F-2 | 1N2482 | 200 | 140 | 0.75 | 5.0 | 75 | \$0.32 | \$0.29 | |
| F-4 | 1N2483 | 400 | 280 | 0.75 | 5.0 | 75 | .40 | .36 | .33 |
| F-6 | 1N2484 | 600 | 420 | 0.75 | 5.0 | 75 | .45 | .40 | .37 |
| F-8 | ..... | 800 | 560 | 0.75 | 5.0 | 75 | .60 | .49 | .46 |

H SERIES 0.75 AMP (FIG. C)

| | | | | | | | | | |
|-----|--------|-----|-----|------|-----|----|--------|--------|-----|
| 10H | ..... | 100 | 70 | 0.75 | 5.0 | 75 | \$0.33 | \$0.31 | |
| 20H | 1N2485 | 200 | 140 | 0.75 | 5.0 | 75 | .40 | .36 | .33 |
| 30H | 1N2486 | 300 | 210 | 0.75 | 5.0 | 75 | .44 | .39 | .36 |
| 40H | 1N2487 | 400 | 280 | 0.75 | 5.0 | 75 | .45 | .40 | .37 |
| 50H | 1N2488 | 500 | 350 | 0.75 | 5.0 | 75 | .50 | .43 | .40 |
| 60H | 1N2489 | 600 | 420 | 0.75 | 5.0 | 75 | .55 | .45 | .42 |
| 80H | ..... | 800 | 560 | 0.75 | 5.0 | 75 | .95 | .80 | .75 |

C SERIES 0.75 AMP (FIG. D)

| | | | | | | | | | |
|-----|--------|-----|-----|------|-------|-------|--------|--------|--------|
| 10C | 1N2610 | 100 | 70 | 0.75 | ..... | ..... | \$0.35 | \$0.33 | \$0.31 |
| 20C | 1N2611 | 200 | 140 | 0.75 | ..... | ..... | .40 | .36 | .33 |
| 30C | 1N2612 | 300 | 210 | 0.75 | ..... | ..... | .44 | .39 | .36 |
| 40C | 1N2613 | 400 | 280 | 0.75 | ..... | ..... | .45 | .40 | .37 |
| 50C | 1N2614 | 500 | 350 | 0.75 | ..... | ..... | .50 | .43 | .40 |
| 60C | 1N2615 | 600 | 420 | 0.75 | ..... | ..... | .55 | .45 | .42 |
| 80C | 1N2616 | 800 | 560 | 0.75 | ..... | ..... | .95 | .80 | .75 |

ST1 SERIES 0.625 AMP (FIG. E)

| | | | | | | | | | |
|------|-------|-----|-----|-------|-------|-------|--------|--------|--------|
| ST12 | ..... | 200 | 140 | 0.625 | 5 | 75 | \$0.35 | \$0.32 | \$0.29 |
| ST14 | ..... | 400 | 280 | 0.625 | 5 | 75 | .40 | .36 | .33 |
| ST16 | ..... | 600 | 420 | 0.625 | 5 | 75 | .45 | .40 | .37 |
| ST18 | ..... | 800 | 560 | 0.625 | ..... | ..... | .60 | .49 | .46 |

*In most cases based on proper heat sink to limit case temperature rise to 60° C.

MEDIUM CURRENT RECTIFIERS

B SERIES 1.6 AMPS (FIG. C)

| S-T No. | JEDEC No. | Max. PIV | Max. RMS Volts | DC Load, Amps | Recur. Peak, Amps | Net Each, Lots of | | |
|---------|-----------|----------|----------------|---------------|-------------------|-------------------|--------|--------|
| | | | | | | 1-24 | 25-99 | 100 Up |
| 20B | | 200 | 140 | 1.6 | 9.6 | \$1.05 | \$0.89 | \$0.83 |
| 40B | | 400 | 280 | 1.6 | 9.6 | 1.25 | 1.07 | 1.00 |
| 60B | | 600 | 420 | 1.6 | 9.6 | 1.50 | 1.27 | 1.19 |
| 80B | | 800 | 560 | 1.6 | 9.6 | 1.80 | 1.55 | 1.44 |

LA SERIES 2 AMPS (FIG. F)

| | | | | | | | | |
|------|---------|-----|-----|-----|----|--------|--------|--------|
| 10LA | 1N1085A | 100 | 70 | 2.0 | 30 | \$3.34 | \$2.86 | \$2.66 |
| 20LA | 1N1086A | 200 | 140 | 2.0 | 30 | 4.00 | 3.43 | 3.20 |
| 30LA | 1N1087A | 300 | 210 | 2.0 | 30 | 4.67 | 4.00 | 3.73 |
| 40LA | 1N1088A | 400 | 280 | 2.0 | 30 | 5.35 | 4.67 | 4.27 |
| 50LA | ..... | 500 | 350 | 2.0 | 30 | 5.87 | 5.03 | 4.70 |
| 60LA | ..... | 600 | 420 | 2.0 | 30 | 6.45 | 5.52 | 5.15 |

H3 SERIES 6 AMPS (FIG. G)

Add suffix N for negative or P for positive base. Add R to JEDEC type for negative base.

| | | | | | | | | |
|------|--------|-----|-----|---|----|--------|--------|--------|
| 10H3 | 1N1342 | 100 | 70 | 6 | 35 | \$1.20 | \$1.03 | \$0.96 |
| 20H3 | 1N1344 | 200 | 140 | 6 | 35 | 1.25 | 1.07 | 1.00 |
| 30H3 | 1N1345 | 300 | 210 | 6 | 35 | 1.55 | 1.33 | 1.24 |
| 40H3 | 1N1346 | 400 | 280 | 6 | 35 | 1.95 | 1.67 | 1.56 |
| 50H3 | 1N1347 | 500 | 350 | 6 | 35 | 2.35 | 2.10 | 1.88 |
| 60H3 | 1N1348 | 600 | 420 | 6 | 35 | 2.70 | 2.32 | 2.16 |
| 80H3 | ..... | 800 | 560 | 6 | 35 | 3.20 | 2.76 | 2.58 |

ST2 SERIES 12 AMP (FIG. G)

Add suffix N for negative base or P for positive base.

| | | | | | | | | |
|-------|--------|-----|-----|----|----|--------|--------|--------|
| ST210 | 1N1200 | 100 | 70 | 12 | 70 | \$1.45 | \$1.26 | \$1.17 |
| ST220 | 1N1202 | 200 | 140 | 12 | 70 | 1.55 | 1.32 | 1.23 |
| ST230 | 1N1203 | 300 | 210 | 12 | 70 | 1.85 | 1.59 | 1.48 |
| ST240 | 1N1204 | 400 | 280 | 12 | 70 | 2.35 | 2.00 | 1.87 |
| ST250 | 1N1205 | 500 | 350 | 12 | 70 | 2.60 | 2.20 | 2.06 |
| ST260 | 1N1206 | 600 | 420 | 12 | 70 | 3.30 | 2.83 | 2.64 |
| ST280 | ..... | 800 | 560 | 12 | 70 | 3.95 | 3.40 | 3.18 |

SILICON CONTROLLED RECTIFIERS (FIG. H)

Four-layer, three-junction devices for switching and power control. Size, 1/4" overall I. Series 3TCR, 3 amps DC; Series 5TCR, 5 amps DC.

| S-T No. | Max. PIV | Net Each, Lots of | | | S-T No. | Max. PIV | Net Each, Lots of | | |
|---------|----------|-------------------|--------|--------|---------|----------|-------------------|--------|--------|
| | | 1-24 | 25-99 | 100 Up | | | 1-24 | 25-99 | 100 Up |
| 3TCRA | 25 | \$2.80 | \$2.39 | \$2.22 | 5TCRA | 25 | \$4.00 | \$3.43 | \$3.20 |
| 3TCRB | 50 | 2.90 | 2.46 | 2.30 | 5TCRB | 50 | 4.70 | 4.05 | 3.77 |
| 3TCRC | 100 | 3.00 | 2.55 | 2.39 | 5TCRC | 100 | 4.85 | 4.15 | 3.86 |
| 3TCRD | 150 | 3.05 | 2.62 | 2.44 | 5TCRD | 150 | 4.95 | 4.23 | 3.94 |
| 3TCRE | 200 | 3.25 | 2.80 | 2.60 | 5TCRE | 200 | 5.10 | 4.38 | 4.08 |
| 3TCRF | 250 | 4.05 | 3.50 | 3.25 | 5TCRF | 250 | 5.95 | 5.10 | 4.24 |
| 3TCRG | 300 | 4.20 | 3.58 | 3.33 | 5TCRG | 300 | 6.05 | 5.16 | 4.81 |
| 3TCRH | 400 | 4.65 | 3.98 | 3.70 | 5TCRH | 400 | 6.50 | 5.57 | 5.18 |
| 3TCRI | 500 | 6.95 | 5.97 | 5.55 | 5TCRI | 500 | 8.80 | 7.55 | 7.03 |

GATE TURNOFF TYPE

Class X and Y prices available on request.

| | | | | | | | | | |
|--------|-----|---------|---------|---------|--------|-----|---------|---------|-------|
| 3GCRZ | 100 | \$ 7.35 | \$ 6.27 | \$ 5.86 | 3GCRFZ | 250 | \$17.90 | \$15.36 | 14.35 |
| 3GCRDZ | 150 | 10.10 | 8.63 | 8.07 | 3GCRGZ | 300 | 24.60 | 21.10 | 19.69 |
| 3GCREZ | 200 | 13.75 | 11.79 | 11.00 | 3GCRHZ | 400 | 31.50 | 27.00 | 25.20 |

