

# Fast Switching Thyristors

# 快速晶闸管

## Feather

Distributed gate design

Fast turn-on and high di/dt

Low switching losses

Designed for inductive heating

and inverter choper applications

分布式门极设计 具有关断时间短高的di/dt 能力

低的开关损耗

应用于感应加热 逆变器 斩波器 等工业领域



## Capsule

| Part No.     | $I_{T(AV)}$      | $V_{DRM}$ | $I_{TSM}$ | $I^2 t$            | $V_{TO}$  | $r_T$     | $tq$      | $R_{thJC}$ | $R_{thCH}$ | F  | Outline |
|--------------|------------------|-----------|-----------|--------------------|-----------|-----------|-----------|------------|------------|----|---------|
|              | $T_c=55^\circ C$ | $V_{RRM}$ | 50Hz      | 50Hz               | $T_{VJM}$ | $T_{VJM}$ | $T_{VJM}$ |            |            |    |         |
|              | A                | V         | A         | $A^2 S \cdot 10^3$ | V         | mΩ        | μs        |            |            |    |         |
| Up to 1600V  |                  |           |           |                    |           |           |           |            |            |    |         |
| KK200/12-16  | 200              | 1200-1600 | 4000      | 80                 | 1.60      | 1.50      | 16-25     | 0.085      | 0.02       | 6  | T6      |
| KK300/12-16  | 300              | 1200-1600 | 4300      | 92                 | 1.50      | 1.40      | 16-25     | 0.045      | 0.01       | 9  | T7      |
| KK400/12-16  | 400              | 1200-1600 | 8500      | 361                | 1.40      | 1.20      | 16-25     | 0.040      | 0.01       | 16 | T9      |
| Up to 1800V  |                  |           |           |                    |           |           |           |            |            |    |         |
| KK500/12-18  | 500              | 1200-1800 | 6500      | 211                | 1.45      | 0.60      | 16-25     | 0.040      | 0.01       | 16 | T9      |
| KK600/12-18  | 600              | 1200-1800 | 10000     | 500                | 1.30      | 0.50      | 16-25     | 0.040      | 0.01       | 20 | T9      |
| KK800/12-18  | 800              | 1200-1800 | 12000     | 720                | 1.35      | 0.40      | 16-25     | 0.030      | 0.008      | 20 | T10     |
| KK1000/12-18 | 1000             | 1200-1800 | 14000     | 980                | 1.55      | 0.35      | 16-25     | 0.020      | 0.006      | 25 | T11     |
| KK1200/12-18 | 1200             | 1200-1800 | 16000     | 1280               | 1.50      | 0.30      | 16-35     | 0.018      | 0.006      | 32 | T12     |
| KK1500/12-18 | 1500             | 1200-1800 | 18000     | 1620               | 1.45      | 0.26      | 16-35     | 0.018      | 0.006      | 32 | T12     |
| KK1800/12-18 | 1800             | 1200-1800 | 19000     | 1805               | 1.42      | 0.25      | 16-35     | 0.013      | 0.005      | 45 | T13     |
| KK2000/12-18 | 2000             | 1200-1800 | 23000     | 2645               | 1.45      | 0.20      | 25-40     | 0.012      | 0.005      | 50 | T14     |
| KK2500/12-18 | 2500             | 1200-1800 | 31000     | 4805               | 1.30      | 0.15      | 25-40     | 0.011      | 0.002      | 55 | T15     |
| Up to 2200V  |                  |           |           |                    |           |           |           |            |            |    |         |
| KK1200/20-22 | 1200             | 2000-2200 | 15000     | 1125               | 1.45      | 0.40      | 30-50     | 0.020      | 0.006      | 25 | T11     |
| KK1500/20-22 | 1500             | 2000-2200 | 16000     | 1280               | 1.50      | 0.32      | 30-50     | 0.018      | 0.006      | 32 | T12     |
| KK1800/20-22 | 1800             | 2000-2200 | 18000     | 1620               | 1.50      | 0.30      | 30-50     | 0.013      | 0.003      | 45 | T13     |
| KK2000/20-22 | 2000             | 2000-2200 | 20000     | 2000               | 1.50      | 0.25      | 30-50     | 0.012      | 0.003      | 50 | T14     |
| KK2500/20-22 | 2500             | 2000-2200 | 30000     | 4500               | 1.30      | 0.20      | 30-50     | 0.011      | 0.002      | 55 | T15     |
| Up to 3000V  |                  |           |           |                    |           |           |           |            |            |    |         |
| KK1000/25-28 | 1000             | 2500-2800 | 10000     | 500                | 1.55      | 0.50      | 30-40     | 0.020      | 0.006      | 25 | T11     |
| KK1200/25-28 | 1200             | 2500-2800 | 12000     | 720                | 1.50      | 0.45      | 30-40     | 0.018      | 0.006      | 32 | T12     |
| KK1500/25-28 | 1500             | 2500-2800 | 15000     | 1125               | 1.50      | 0.32      | 30-40     | 0.018      | 0.006      | 32 | T12     |

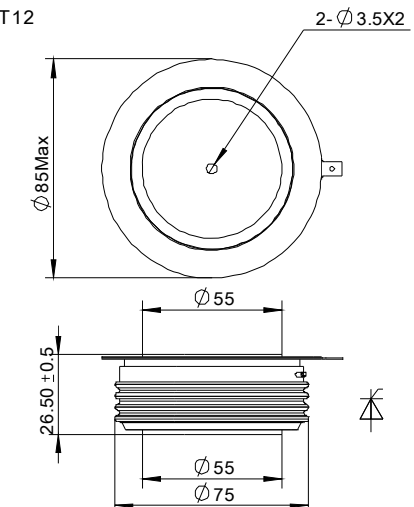
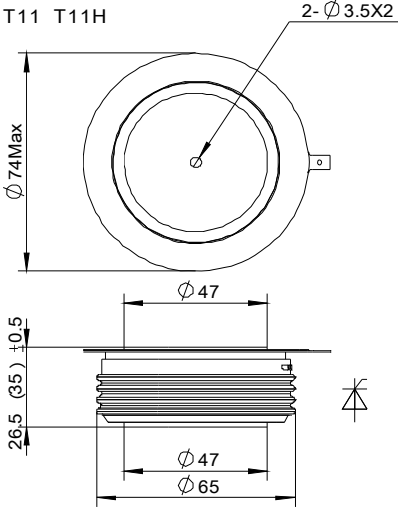
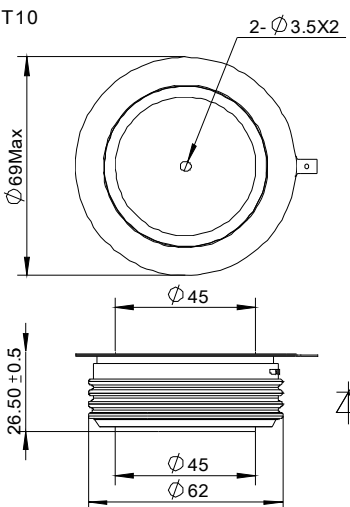
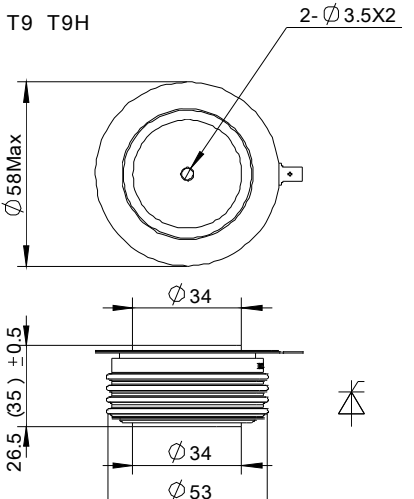
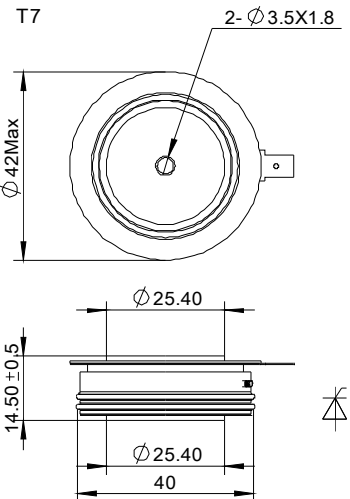
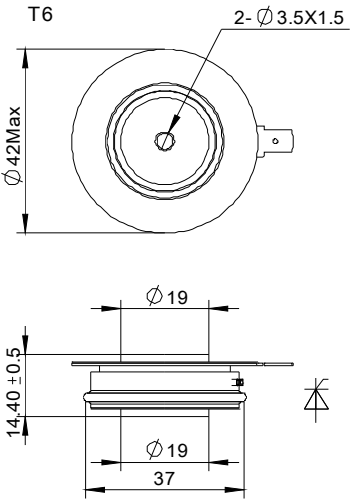
| Part No.     | $I_{T(AV)}$      | $V_{DRM}$ | $I_{TSM}$ | $I^2 t$            | $V_{TO}$  | $r_T$      | $tq$      | $R_{thJC}$ | $R_{thCH}$ | F  | Outline |
|--------------|------------------|-----------|-----------|--------------------|-----------|------------|-----------|------------|------------|----|---------|
|              | $T_c=55^\circ C$ | $V_{RRM}$ | 50Hz      | 50Hz               | $T_{VJM}$ | $T_{VJM}$  | $T_{VJM}$ |            |            |    |         |
|              | A                | V         | A         | $A^2 S \cdot 10^3$ | V         | m $\Omega$ | $\mu s$   |            |            |    |         |
| KK1800/25-28 | 1800             | 2500-2800 | 18000     | 1620               | 1.50      | 0.32       | 30-40     | 0.013      | 0.005      | 45 | T13     |
| KK2000/25-28 | 2000             | 2500-2800 | 20000     | 2000               | 1.48      | 0.25       | 30-40     | 0.012      | 0.005      | 50 | T14     |
| KK2500/25-28 | 2500             | 2500-2800 | 25000     | 3125               | 1.50      | 0.18       | 35-50     | 0.011      | 0.002      | 55 | T15     |
| KK3000/25-30 | 3000             | 2500-3000 | 35000     | 6125               | 1.32      | 0.15       | 70-85     | 0.007      | 0.002      | 70 | T16     |
| KK4000/25-30 | 4000             | 2500-3000 | 45000     | 10125              | 1.30      | 0.13       | 100-115   | 0.006      | 0.001      | 90 | T17     |

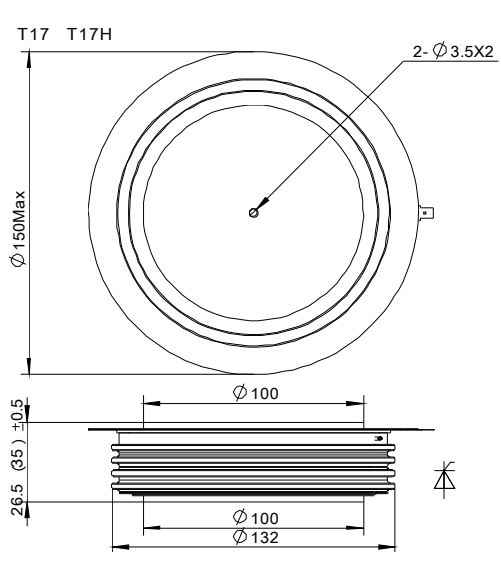
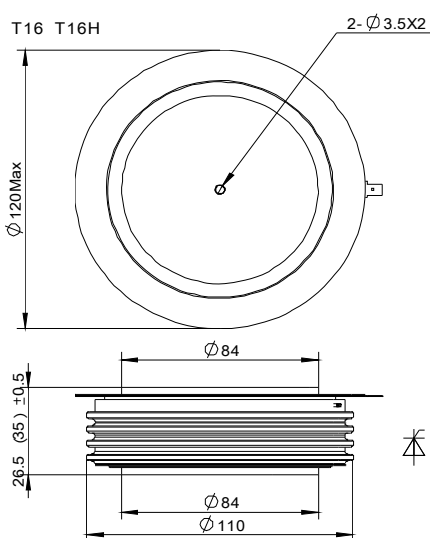
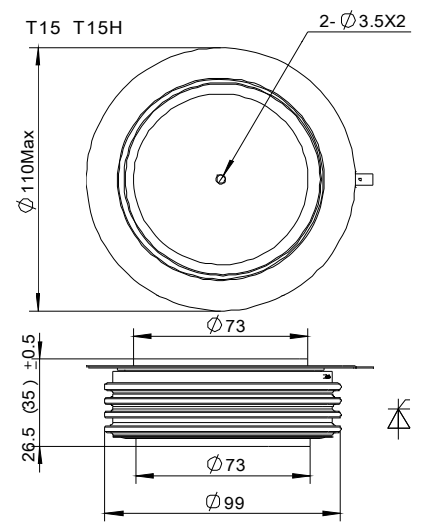
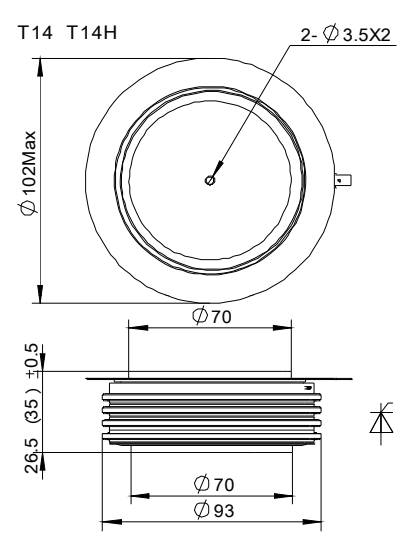
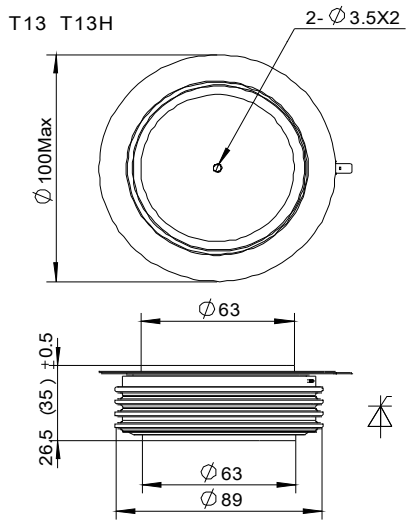
| Up to 3500V  |      |           |       |      |      |      |         |       |       |    |     |
|--------------|------|-----------|-------|------|------|------|---------|-------|-------|----|-----|
| KK3200/35-45 | 3200 | 2500-3000 | 41000 | 8405 | 1.65 | 0.22 | 150-200 | 0.006 | 0.001 | 90 | T17 |

If need 35mm please note outline H code H: 35mm

**Asymmetrical**

| Part No. | $I_{T(AV)}$      | $V_{DRM}$ | $I_{TSM}$ | $I^2 t$            | $V_{TO}$  | $r_T$      | $tq$      | $R_{thJC}$ | $R_{thCH}$ | F  | Outline |
|----------|------------------|-----------|-----------|--------------------|-----------|------------|-----------|------------|------------|----|---------|
|          | $T_c=55^\circ C$ |           | 50Hz      | 50Hz               | $T_{VJM}$ | $T_{VJM}$  | $T_{VJM}$ |            |            |    |         |
|          | A                |           | A         | $A^2 S \cdot 10^3$ | V         | m $\Omega$ | $\mu s$   |            |            |    |         |
| KK1300   | 1300             | 2800      | 16000     | 1280               | 1.50      | 0.30       | 50        | 0.020      | 0.005      | 25 | T11     |





JING LI POWER ELECTRONICS CO.,LTD  
 ADD:Nanjing Road,Heping Dist.Tianjin,China  
 Email:power\_semi@yahoo.com Site:www.power-thyristor.com