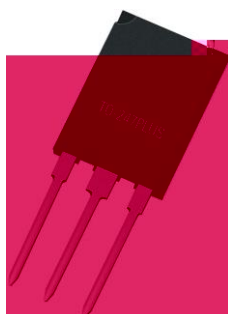




# DGQ75N120CTL1A

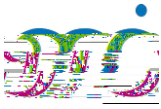
---



## Maximum Ratings

---

| Parameter | Symbol | Value | Unit |
|-----------|--------|-------|------|
|-----------|--------|-------|------|





# DGQ75N120CTL1A

---

## Electrical Characteristics of the Diode $T_j = 25$ unless otherwise specified

| Parameter | Symbol |
|-----------|--------|
|-----------|--------|



# DGQ75N120CTL1A

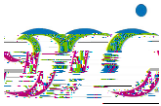
## Electrical Characteristics of the DIODE

| Parameter                         | Symbol           | Conditions                                                | Min. | Typ. | Max. | Unit |
|-----------------------------------|------------------|-----------------------------------------------------------|------|------|------|------|
| Dynamic , at T <sub>j</sub> = 25  |                  |                                                           |      |      |      |      |
| Reverse Recovery Current          | I <sub>rr</sub>  | I <sub>F</sub> =75A, V <sub>R</sub> =600V,<br>di/dt= -500 | -    | 9    | -    | A    |
| Diode reverse recovery time       | trr              |                                                           | -    | 268  | -    | ns   |
| Reverse Recovery Charge           | Q <sub>rr</sub>  |                                                           | -    | 3.42 | -    | uC   |
| Reverse Recovery Energy           | E <sub>rec</sub> |                                                           | -    | 1.52 | -    | mJ   |
| Dynamic , at T <sub>j</sub> = 125 |                  |                                                           |      |      |      |      |
| Reverse Recovery Current          | I <sub>rr</sub>  | I <sub>F</sub> =75A, V <sub>R</sub> =600V,<br>di/dt= -500 | -    | 12   | -    | A    |
| Diode reverse recovery time       | trr              |                                                           | -    | 337  | -    | ns   |
| Reverse Recovery Charge           | Q <sub>rr</sub>  |                                                           | -    | 6.58 | -    | uC   |
| Reverse Recovery Energy           | E <sub>rec</sub> |                                                           | -    | 3.18 | -    | mJ   |
| Dynamic , at T <sub>j</sub> = 150 |                  |                                                           |      |      |      |      |
| Reverse Recovery Current          | I <sub>rr</sub>  | I <sub>F</sub> =75A, V <sub>R</sub> =600V,<br>di/dt= -500 | -    | 14   | -    | A    |
| Diode reverse recovery time       | trr              |                                                           | -    | 375  | -    | ns   |
| Reverse Recovery Charge           | Q <sub>rr</sub>  |                                                           | -    | 9.45 | -    | uC   |
| Reverse Recovery Energy           | E <sub>rec</sub> |                                                           | -    | 3.73 | -    | mJ   |

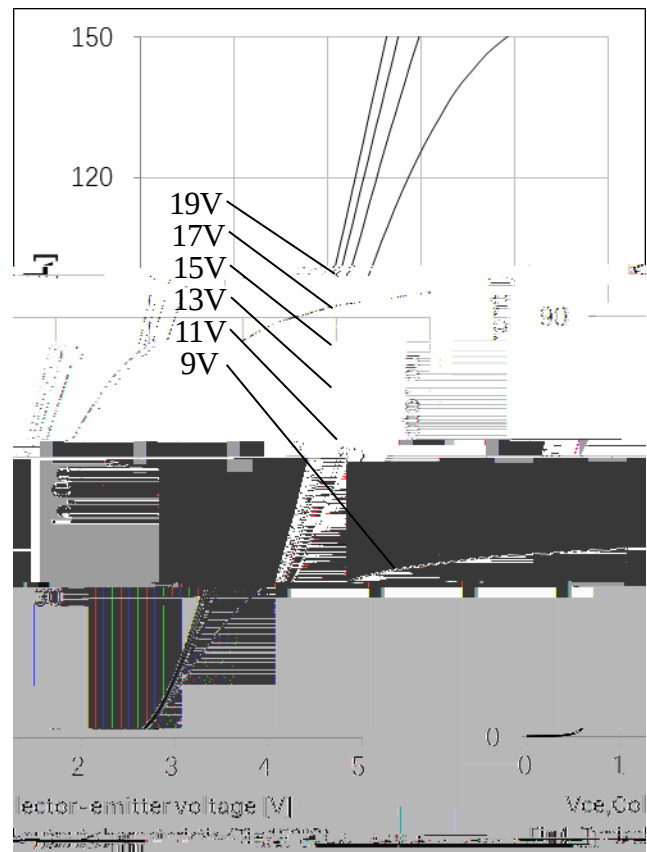
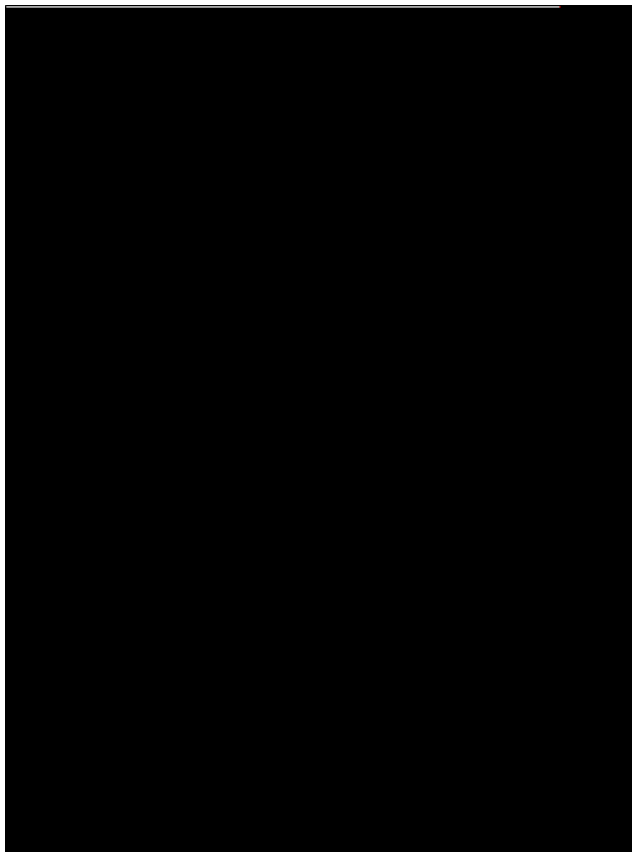
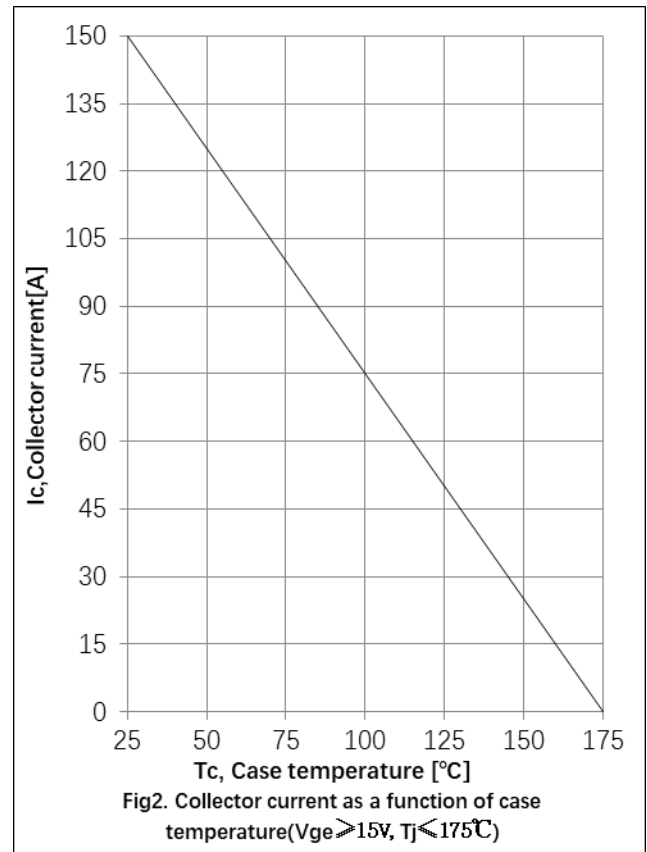
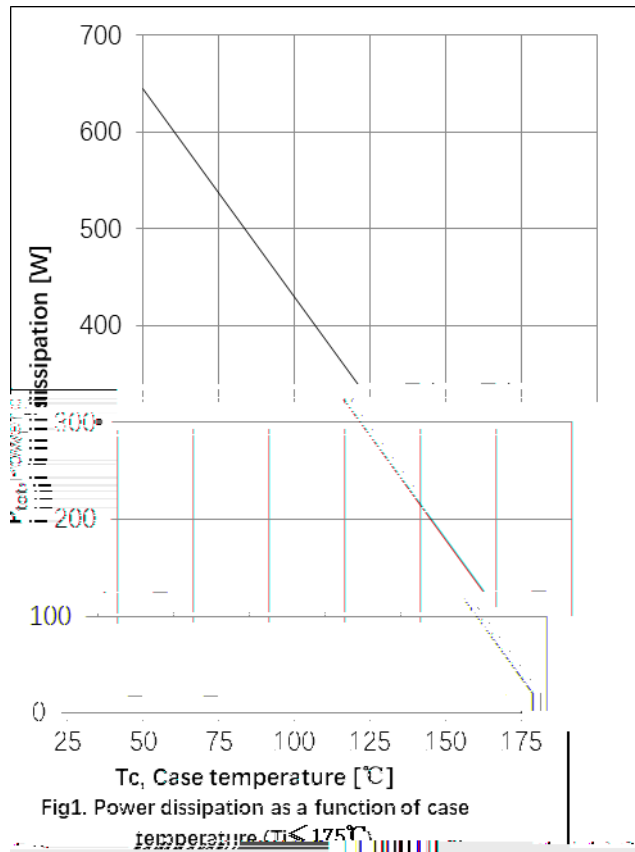
## Thermal Resistance

| Parameter | Symbol | Max. Value | Unit |
|-----------|--------|------------|------|
|-----------|--------|------------|------|

IGBT Thermal Resistance, Junction - Case

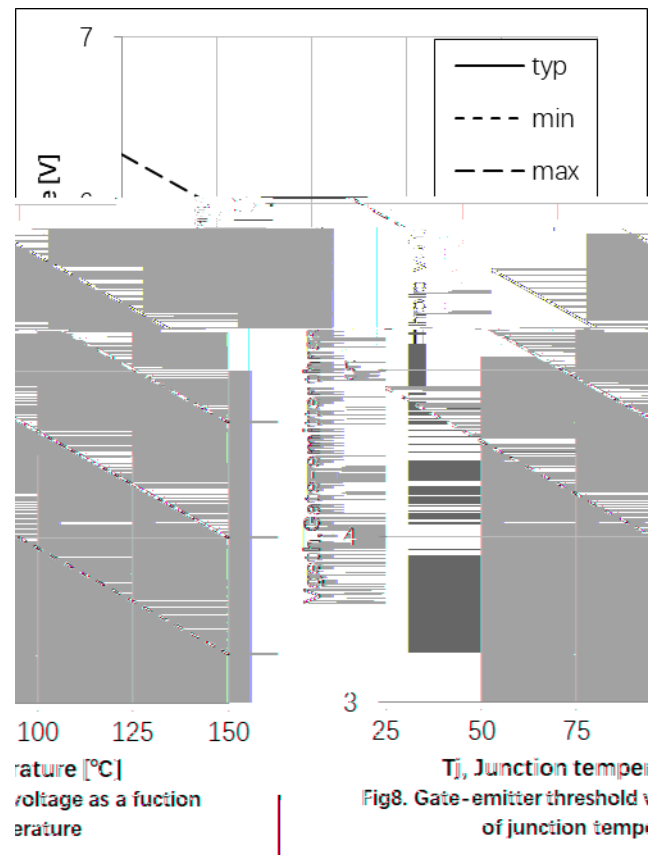
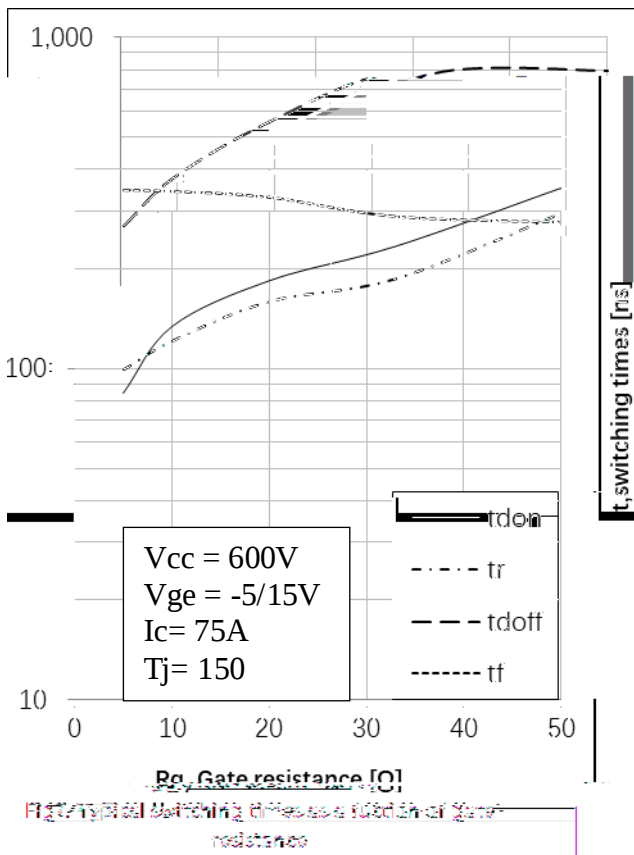
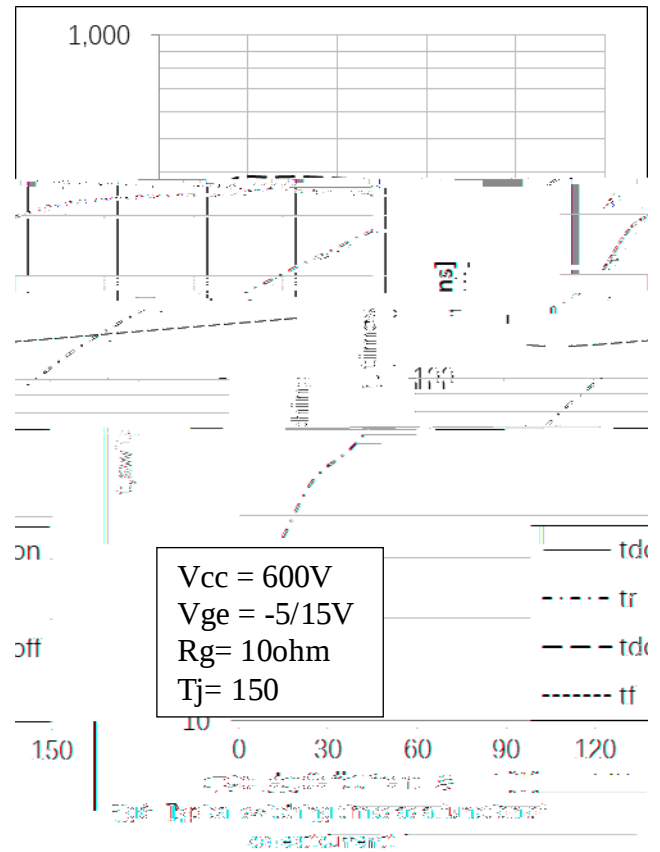
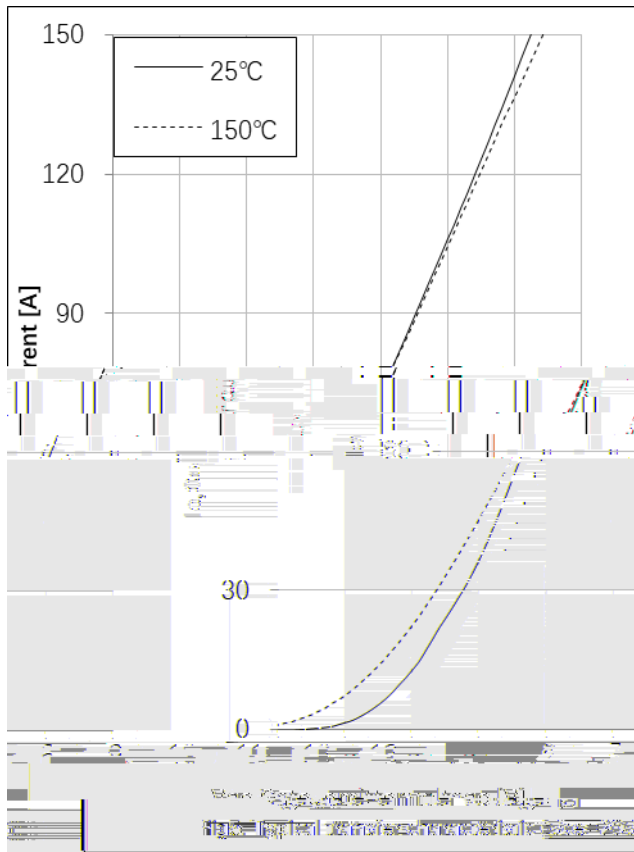


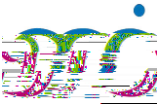
# DGQ75N120CTL1A



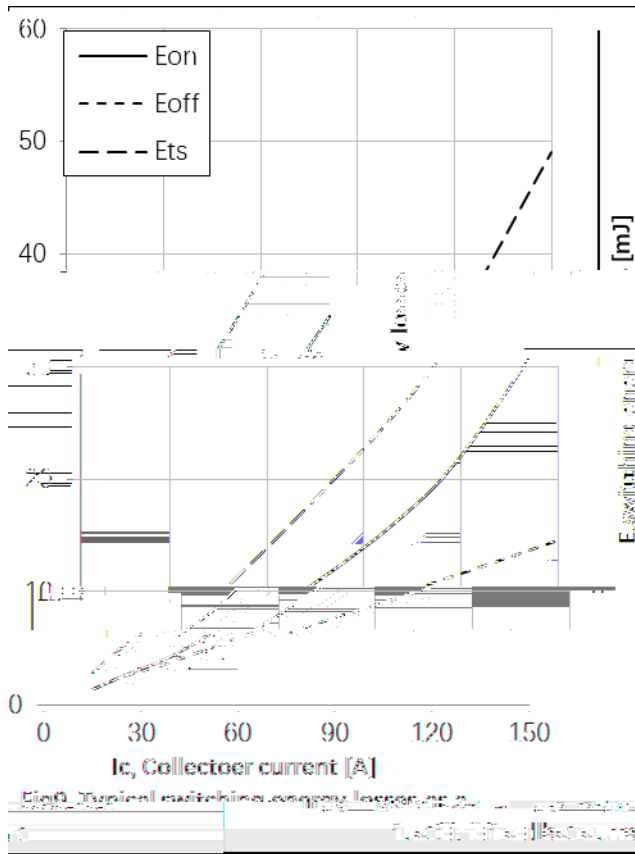


# DGQ75N120CTL1A



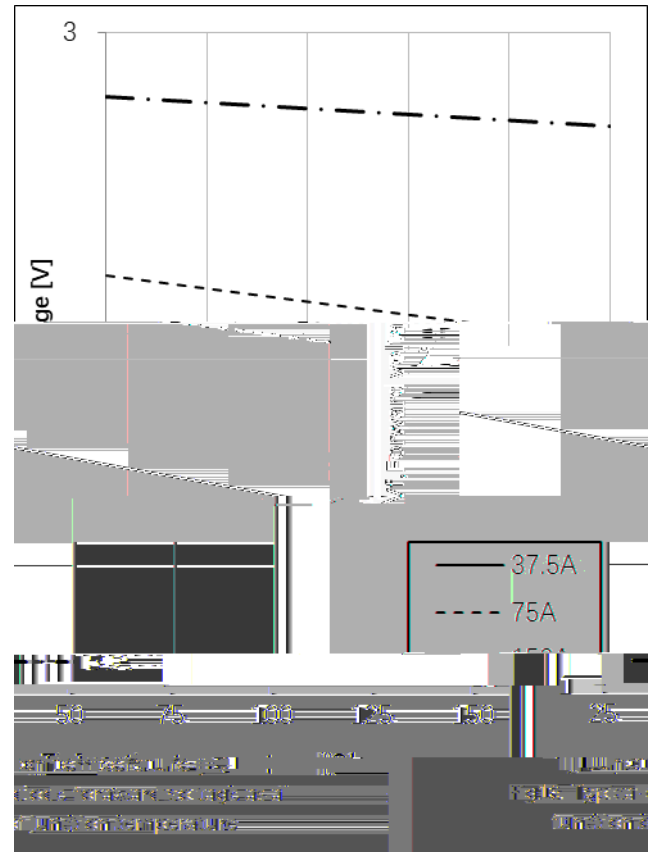
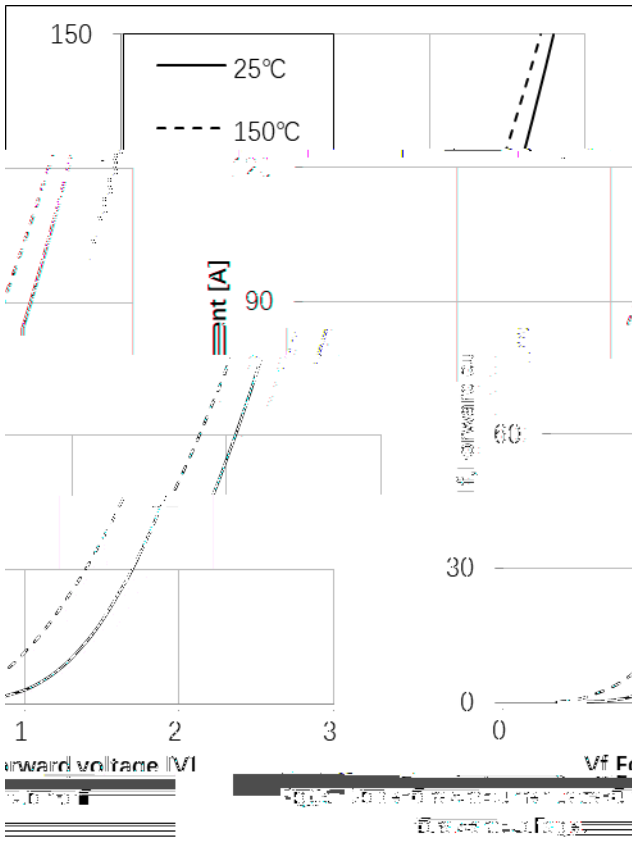
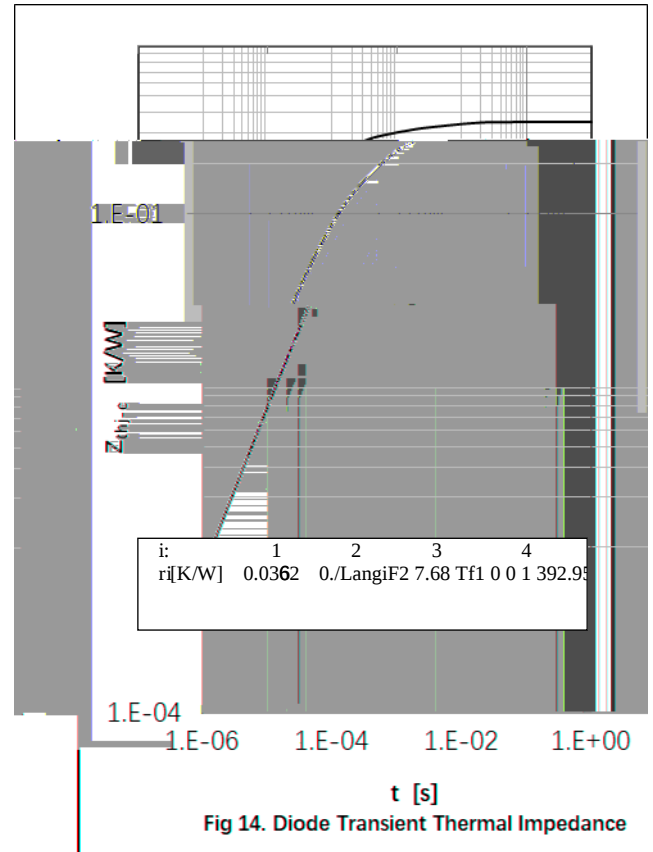
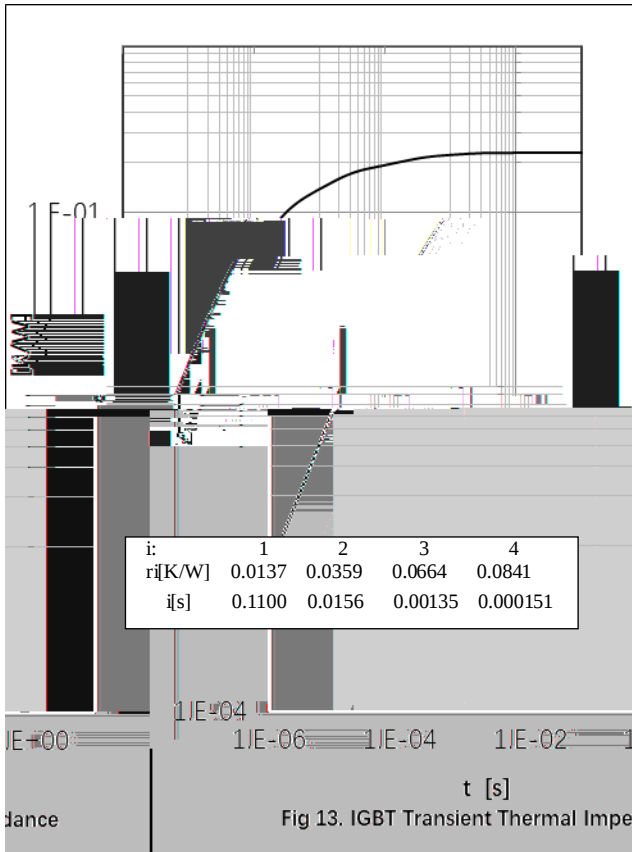


# DGQ75N120CTL1A



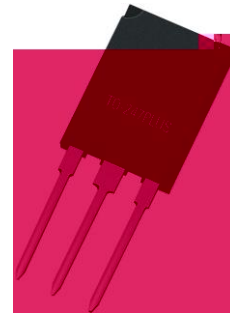


# DGQ75N120CTL1A

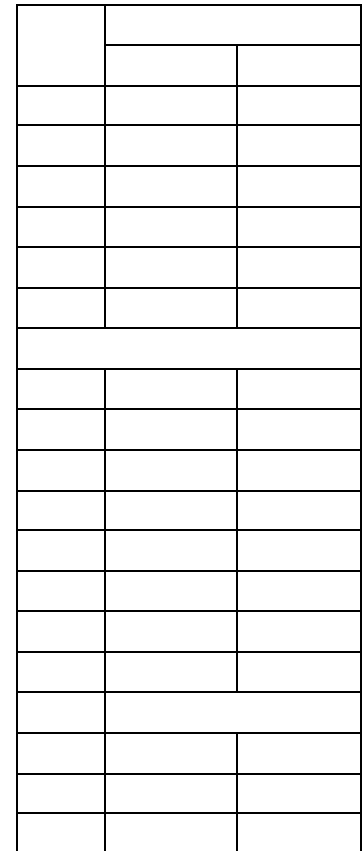


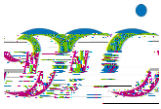


## M



## CASE: TO 247plus





**DGQ**