STGYA120M65DF2

Trench gate field-stop IGBT, M series 650 V, 120 A low loss in a Max247 long leads package

Datasheet - production data

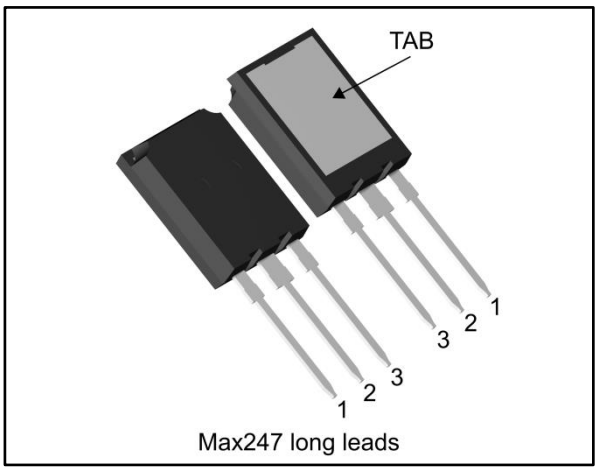
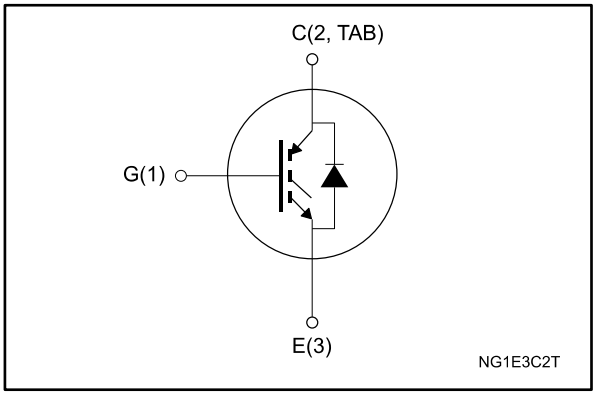


Figure 1: Internal schematic diagram



Features

- 6 µs of short-circuit withstand time
- $V_{CE(sat)}$ = 1.65 V (typ.) @ I_C = 120 A
- Tight parameter distribution
- Safer paralleling
- Positive $V_{CE(sat)}$ temperature coefficient
- Low thermal resistance
- Soft and very fast recovery antiparallel diode
- Maximum junction temperature: T_J = 175 °C

Applications

- Motor control
- UPS
- PFC
- General purpose inverter

Description

This device is an IGBT developed using an advanced proprietary trench gate field-stop structure. The device is part of the M series IGBTs, which represent an optimal balance between inverter system performance and efficiency where low-loss and short-circuit functionality are essential. Furthermore, the positive $V_{CE(sat)}$ temperature coefficient and tight parameter distribution result in safer paralleling operation.

Table 1: Device summary

Order code	Marking	Package	Packing
STGYA120M65DF2	G120M65DF2	Max247 long leads	Tube

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