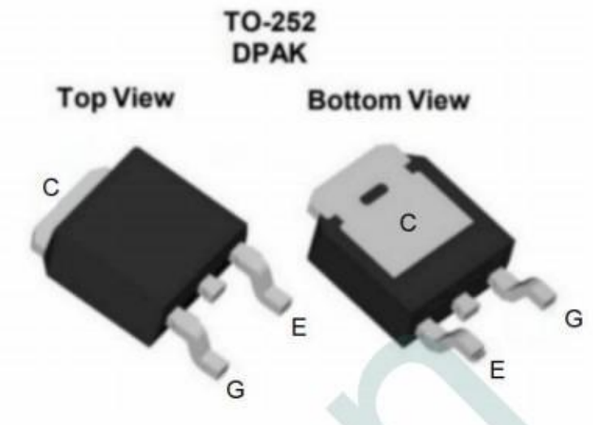
FMT5N65QDMFK

650V 5A CoolFAST™ series seventh generation

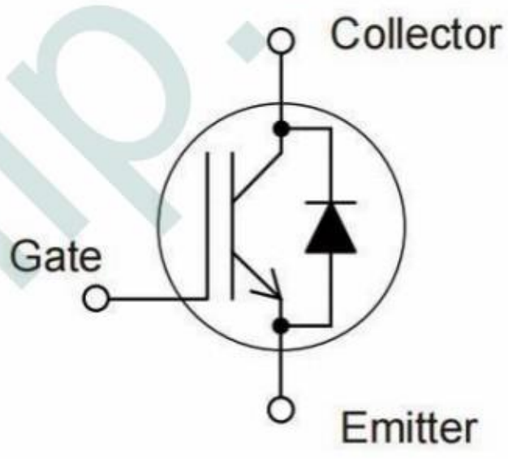
Features:

- Low switching power loss
- Low switching surge and noise
- Advanced Field Stop technology
- Low EMI
- Maximum junction temperature 175°C
- Qualified according to JEDEC for target applications
- Pb-free lead plating, halogen-free mold compound, RoHS compliant



Applications:

- Industrial UPS
- Welding machine
- Solar converters
- Energy Storage
- EV Charger



Maximum Ratings and Characteristics

Absolute Maximum Ratings at T_{vj}= 25°C (unless otherwise specified)

Items	Symbols	Value	Units
Collector-Emitter voltage	BV_{CES}	650V	V
Gate-Emitter voltage Transient Gate-emitter voltage (tp ≤10μs, D <0.010)	V_{GES}	±20	V
DC Collector Current, limited by Tvjmax Tc= 25°C Tc= 100°C	I_C	 10 5	A
Pulsed Collector Current, tp limited by Tvjmax	I_{CP}	15	A
Short circuit withstand time	Tsc	10	us
Diode Forward Current, limited by Tvjmax Tc= 25°C Tc= 100°C	I_F	 6 3	A
IGBT Max. Power Dissipation	P_{D_IGBT}	20	W
FWD Max. Power Dissipation	P_{D_FWD}	12	W
Operating Junction Temperature	Tvj	-55 ~ +175	℃
Storage Temperature（(tp >1s, N <1000）	Tstg	-55 ~ +175	℃

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