

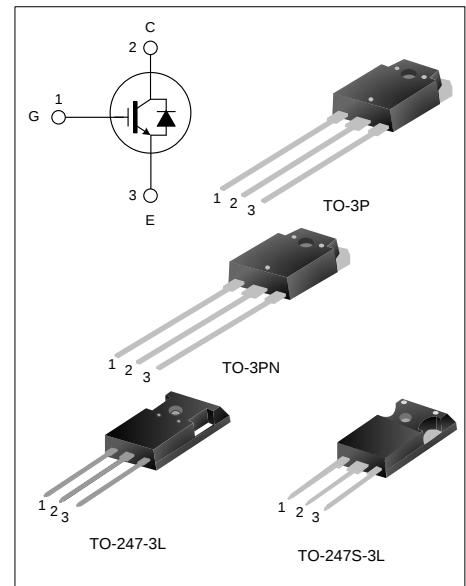
50A, 650V FIELD STOP IGBT

DESCRIPTION

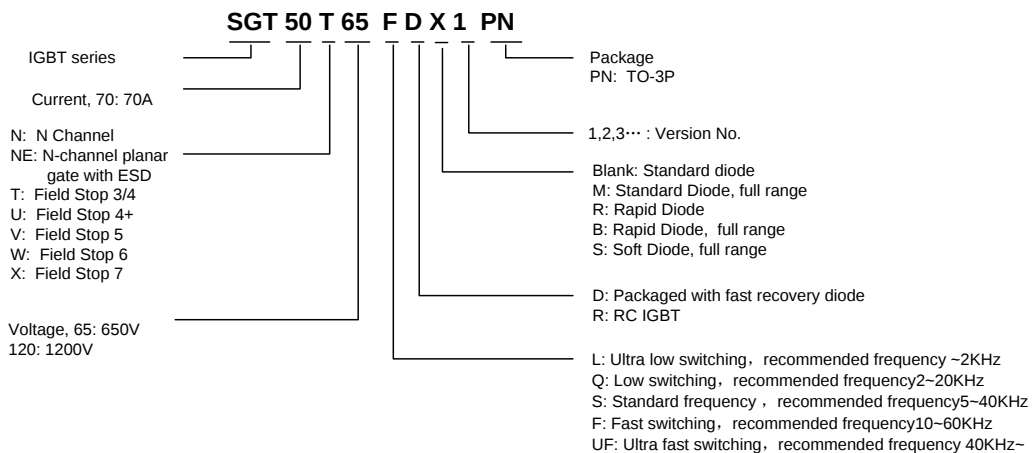
SGT50T65FD1PN/P7/PS/PT using Field Stop IV IGBT technology, offers the optimum performance for induction Heating, UPS, SMPS and PFC application.

FEATURES

- ◆ 50A, 650V, $V_{CE(sat)(typ.)}=2.2V@I_C=50A$
- ◆ Low conduction loss
- ◆ Fast switching
- ◆ High input impedance



NOMENCLATURE



ORDERING INFORMATION

Part No.	Package	Marking	Hazardous Substance Control	Packing Type
SGT50T65FD1PN	TO-3P	50T65FD1	Pb free	Tube
SGT50T65FD1P7	TO-247-3L	50T65FD1	Pb free	Tube
SGT50T65FD1PS	TO-247S-3L	50T65D1	Pb free	Tube
SGT50T65FD1PT	TO-3PN	50T65FD1	Pb free	Tube



ABSOLUTE MAXIMUM RATINGS (T_C=25°C UNLESS OTHERWISE NOTED)

Parameter		Symbol	Ratings	Units
Collector to Emitter Voltage		V _{CE}	650	V
Gate to Emitter Voltage		V _{GE}	±20	V
Transient G-E voltage		V _{GEM}	±30	V
Collector Current	T _C =25°C	I _C	100	A
	T _C =100°C		50	
Pulsed Collector Current		I _{CM}	150	A
Diode Current		I _F	25	A
Power Dissipation (T _C =25°C)		P _D	235	W
Operating Junction Temperature Range		T _J	-55~+150	°C
Storage Temperature Range		T _{stg}	-55~+150	°C

THERMAL CHARACTERISTICS

Parameter	Symbol	Ratings	Units
Thermal Resistance, Junction to Case (IGBT)	R _{θJC}	0.53	°C/W
Thermal Resistance, Junction to Case (FRD)	R _{θJC}	1.48	°C/W