Features

- Half-bridge SCR configuration integrated
- In a single package
- High-thermal-conductivity DBC insulation for excellent
- heat dissipation
- Vacuum soldering technology for enhanced reliability

Product Summary

Applications

- Heating control
- Light control system
- DC motor

Absolute Maximum Ratings (@ T_C = 25℃ unless otherwise specified)

Non P -repetitive pt689 f 213.72 224.64 0.48 27.84 re f 348.36 224.64 0.48 27.84 re f 390.84 224.64 0.48 27.84 re f 497.16

Electrical Characteristics (@ T_C = 25℃ unless otherwise specified)

Parameter	Conditions	Symbol	Values			Unit
			Min.	Typ.	Max.	
Peak forward voltage	I_T=210A, t_P=380 V	V_T			1.80	V
Repetitive peak off-state current	V_D = V_{DRM},T_{vj} = 25	I_{DRM}			100	A
	V_D = V_{DRM},T_{vj} = 125				30	mA
Reverse leakage current	V_R = V_{RRM},T_{vj} = 25	I_{RRM}			100	A
	V_R = V_{RRM},T_{vj} = 125				30	mA
Threshold voltage	For power loss calculation only T_{vj} = 125	V_{TO}			0.92	V
Dynamic resistance	T_{vj} = 125	r_T			3.3	P
Triggering gate current	V_D=12V R_L	I_{GT}	20		120	mA
Holding current	I_T=1A	I_H			250	mA
Latching current	I_G=1.2 I_{GT}	I_L			300	mA
Critical rate of rise of voltage	V_D=2/3V_{DRM} Tvj=125 - Gate Open	dv/dt	1000			9 V
Triggering gate voltage	V_D=12V R_L	V_{GT}			1.8	V
Non triggering gate voltage	V_D=0.5V_{DRM} Tvj=125	V_{GD}	0.25			V

Thermal Characteristics (@ T_C = 25℃ unless otherwise specified)

Parameter	Conditions	Symbol	Values			Unit
			Min.	Typ.	Max.	
Thermal resistance, junction to case						

Circuit Diagram