



Electrical Characteristics of the IGBT

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Static						

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Dynamic						



Switching Characteristic, Inductive Load

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Dynamic , at T_J= 25°C						
Dynamic , at T_J= 125°C						
Dynamic , at T_J= 150°C						

Electrical Characteristics of the Diode

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
	Static					

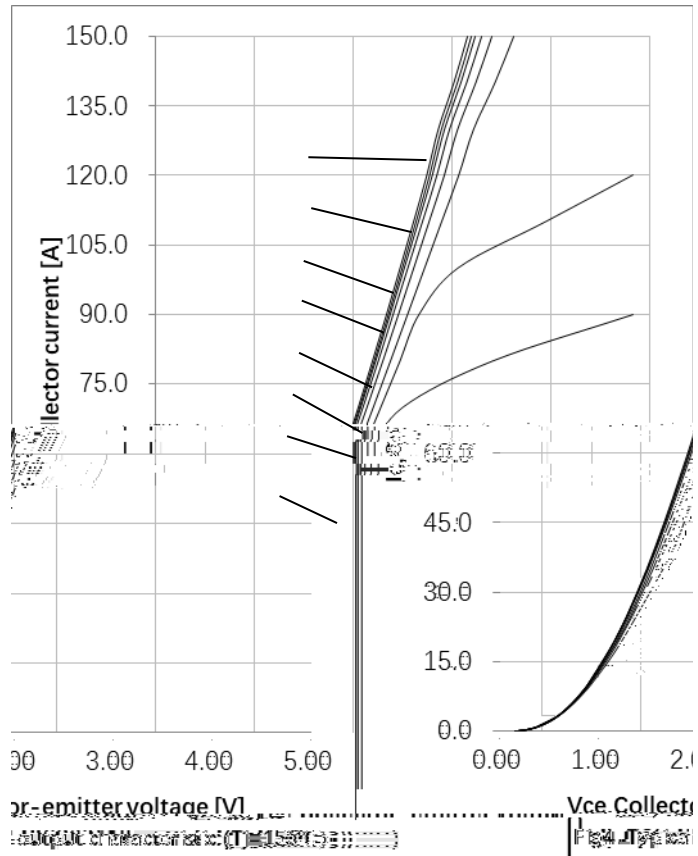
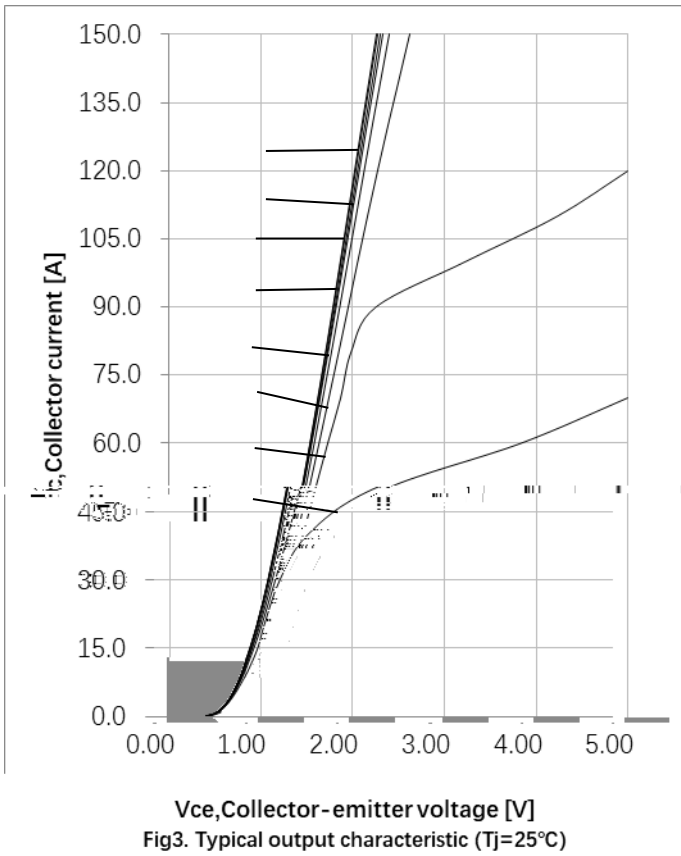
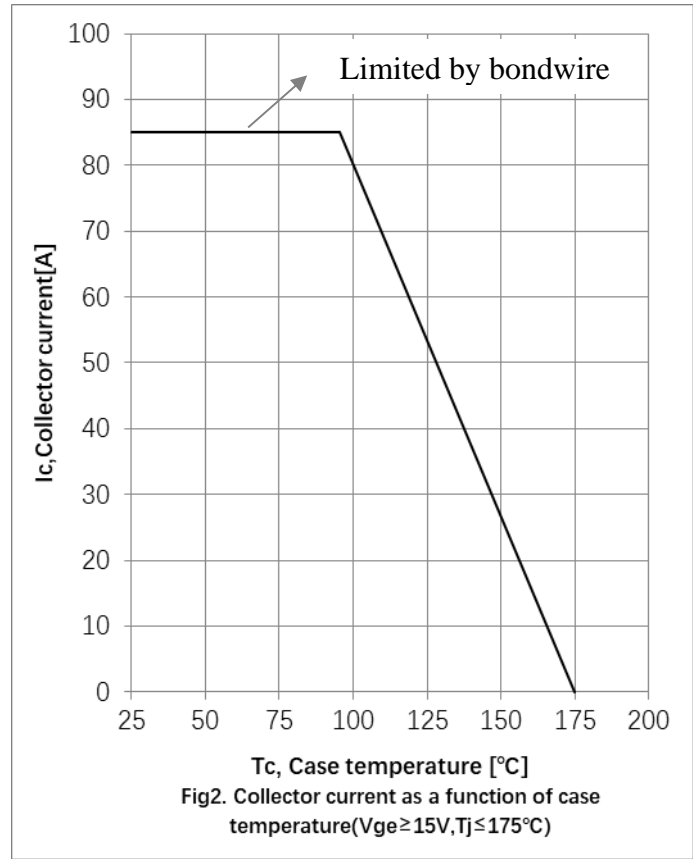
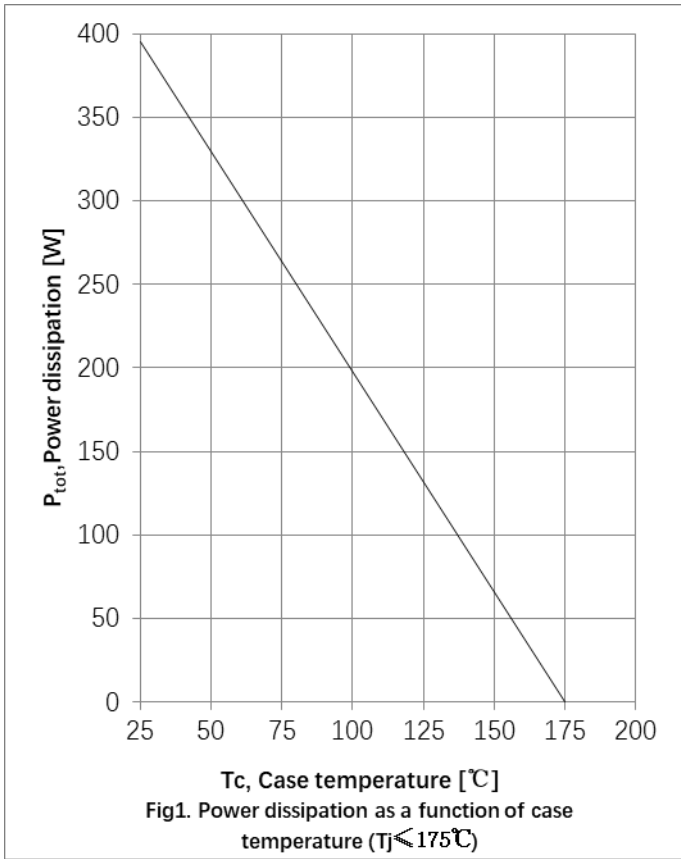


Electrical Characteristics of the Diode

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Dynamic , at T _j = 25°C						
Dynamic , at T _j = 125°C						
Dynamic , at T _j = 150°C						

Thermal Resistance

Parameter	Symbol	Max. Value	Unit



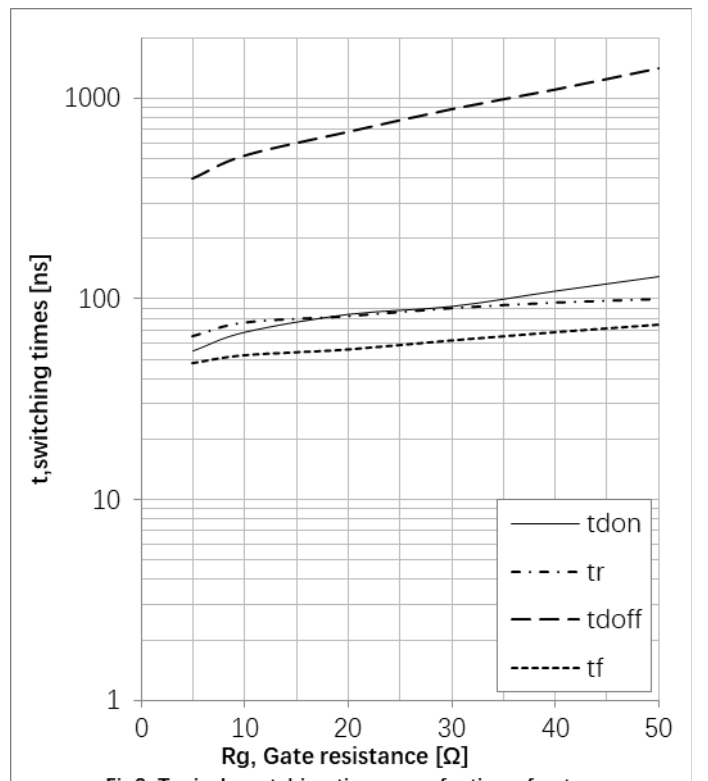
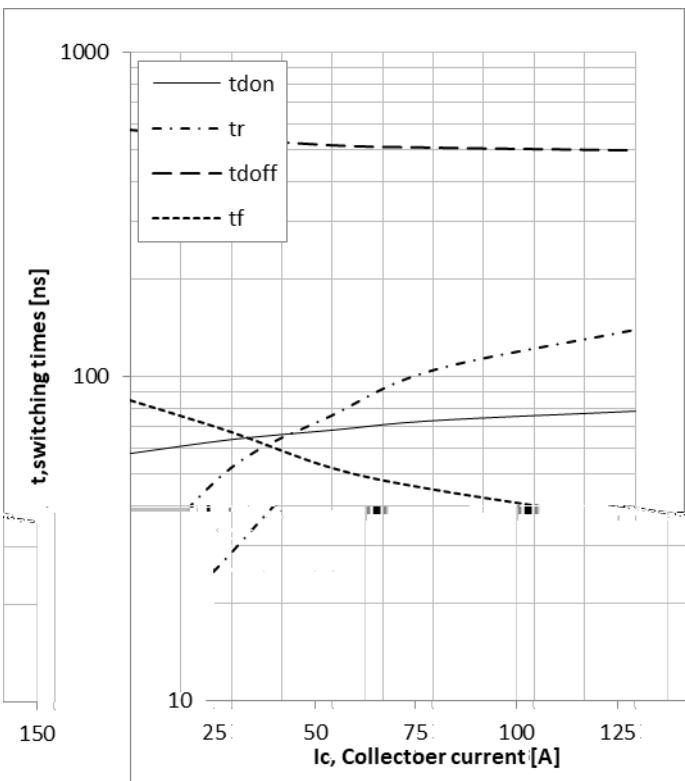
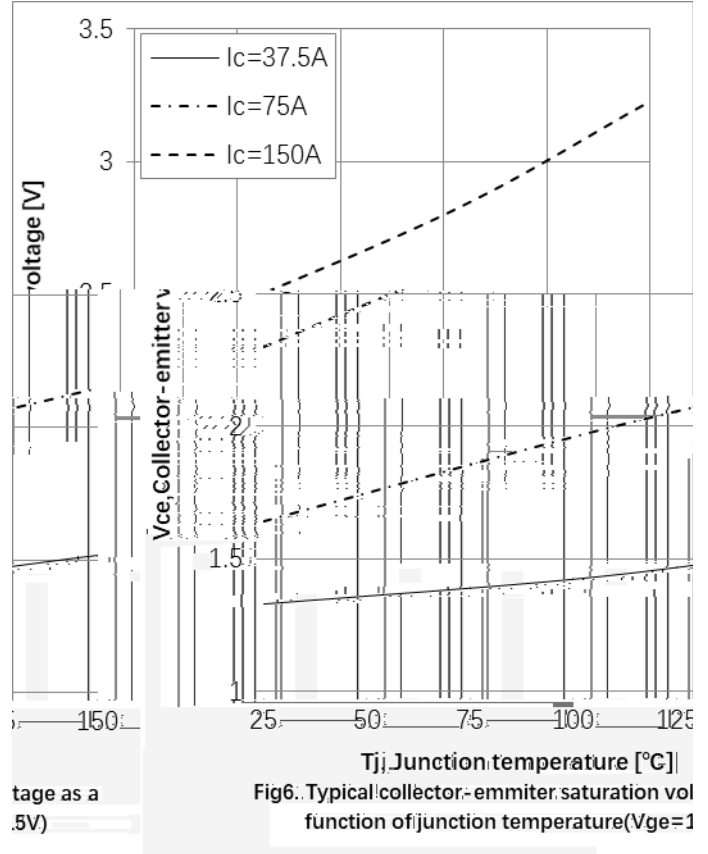
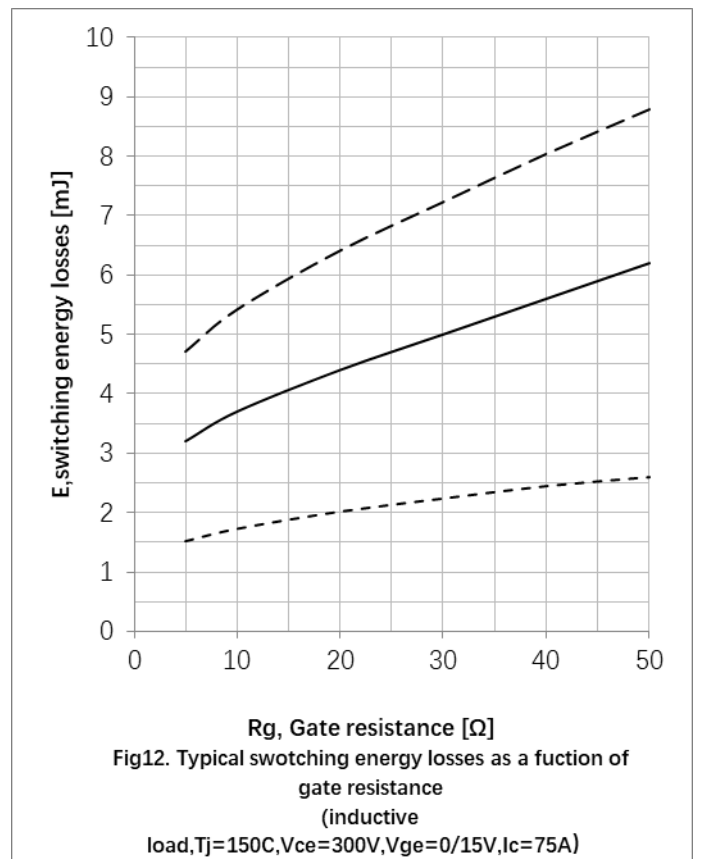
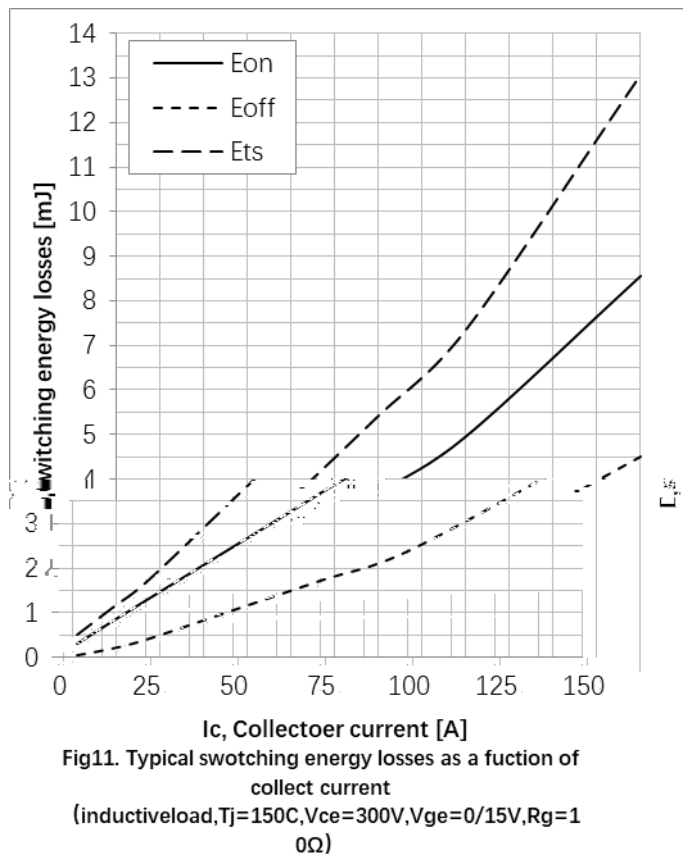
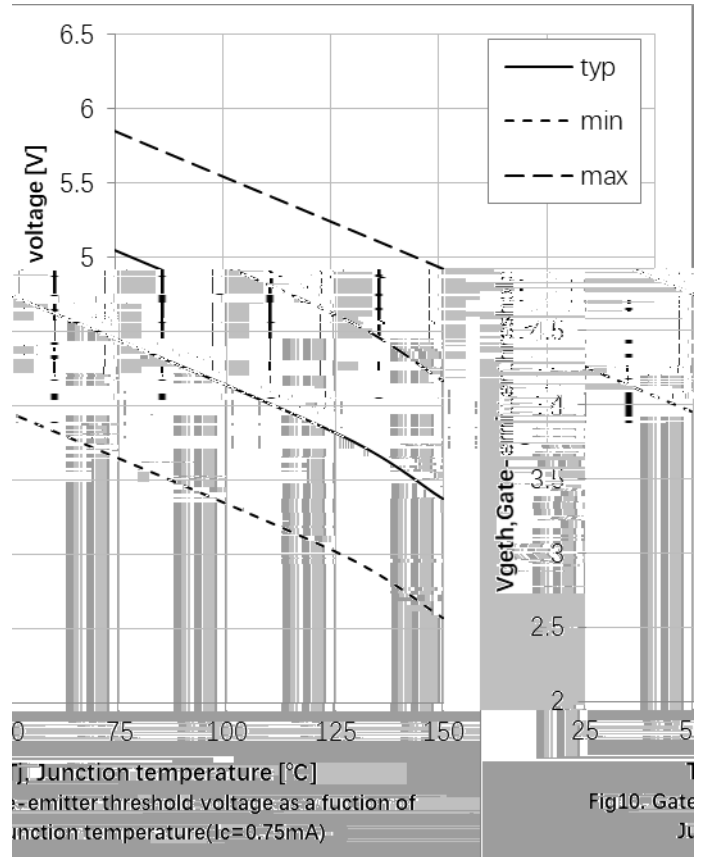
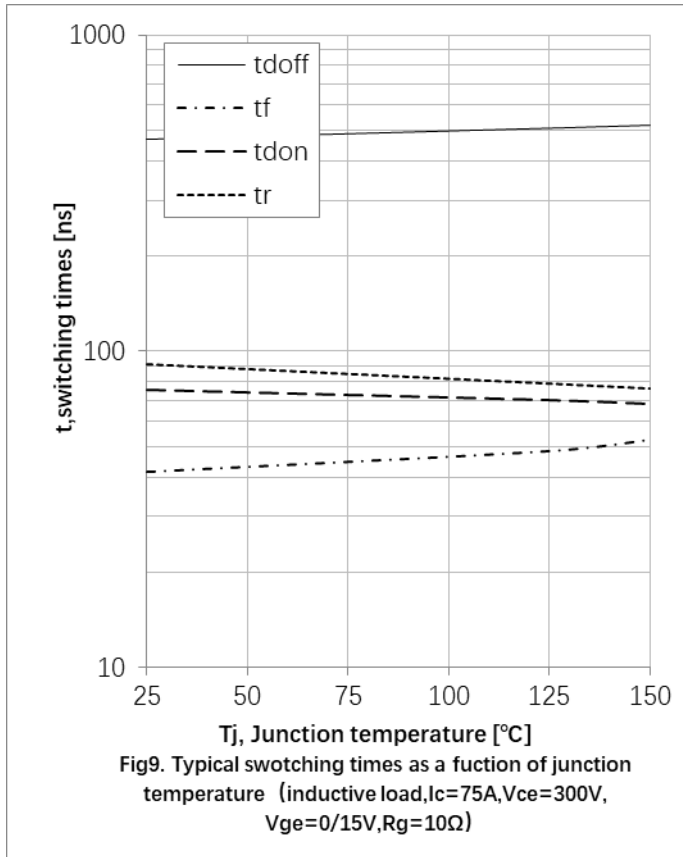


Fig7. Typical switching time as a function of collect curr (inductive load, $T_j=150^\circ\text{C}$, $V_{ce}=300\text{V}$, $V_{ge}=0/15\text{V}$, $R_g=10\Omega$)

Fig8. Typical switching times as a fuction of gate resistance (inductive load, $T_j=150^\circ\text{C}$, $V_{ce}=300\text{V}$, $V_{ge}=0/15\text{V}$, $I_c=75\text{A}$)



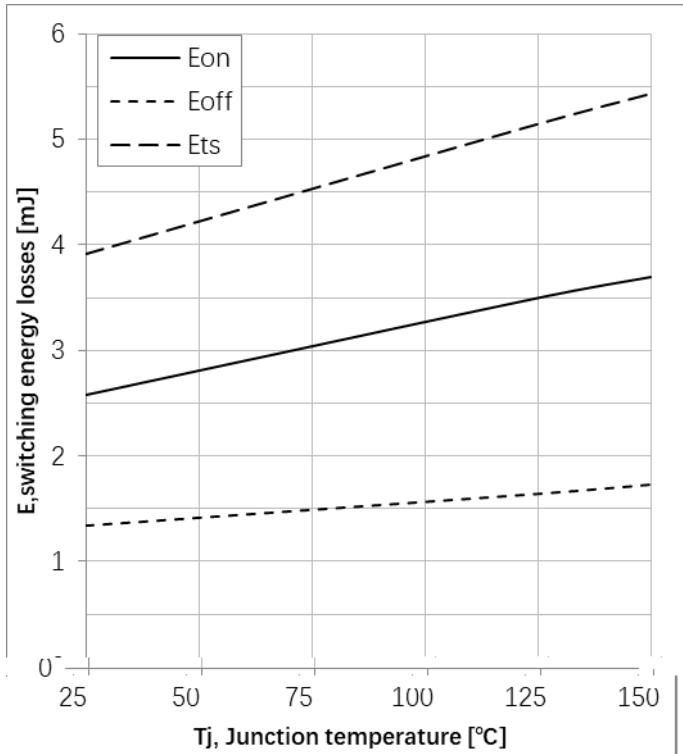


Fig13. Typical switching energy losses as a function of

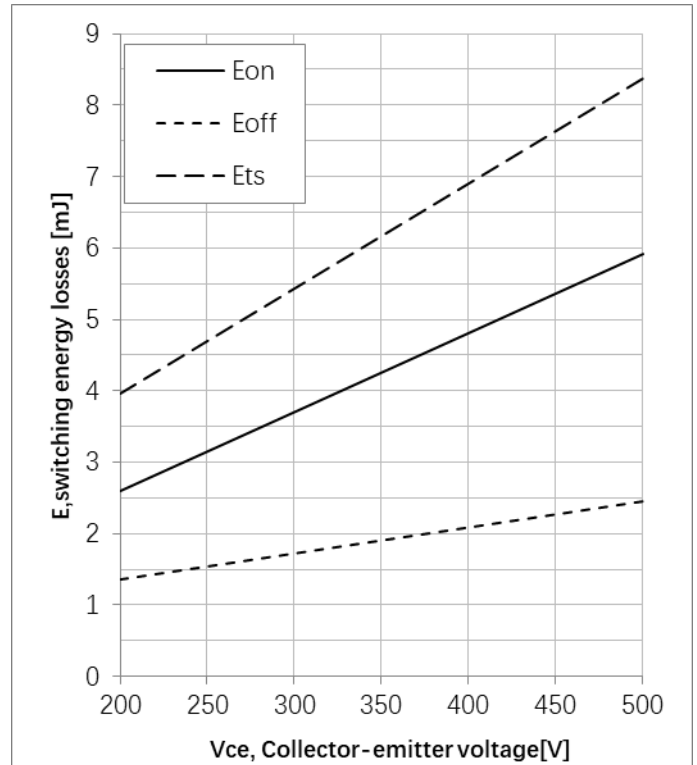


Fig14. Typical switching energy losses as a function of collector-emitter voltage (inductive load, T_j=150°C, I_c=75A, V_{ge}=0/15V, R_g=10Ω)

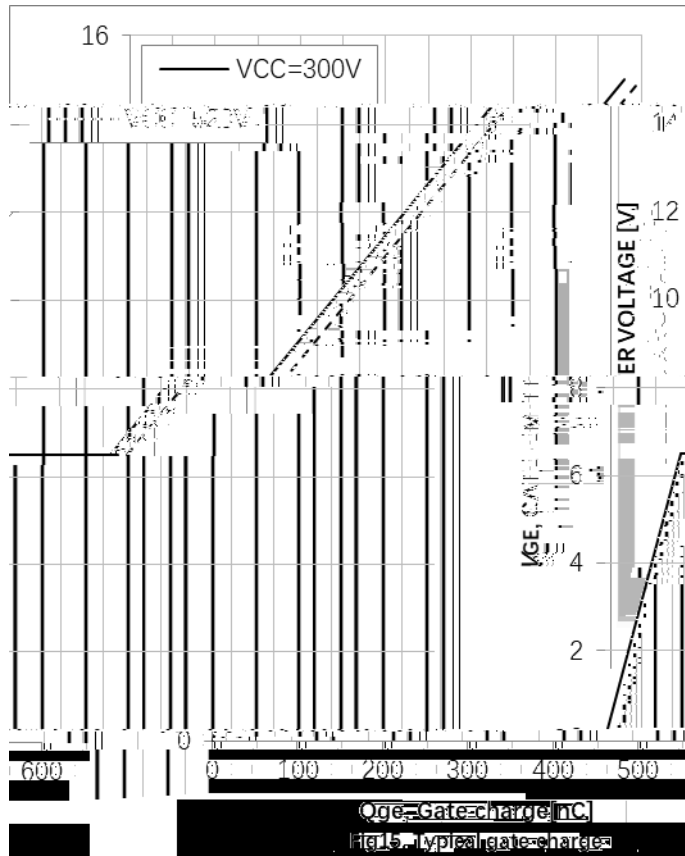


Fig15. Typical gate charges

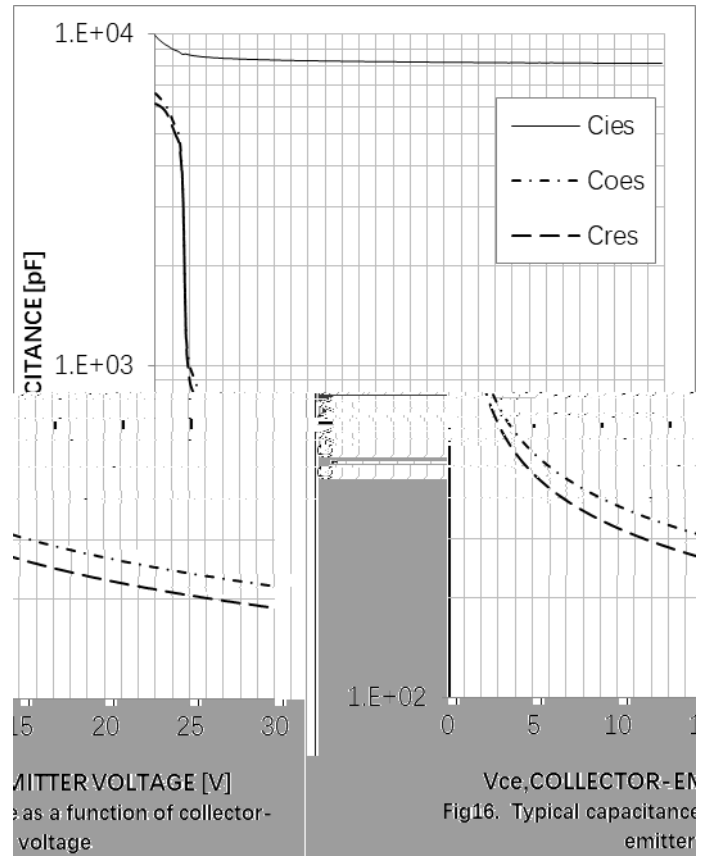


Fig16. Typical capacitance as a function of collector-emitter voltage

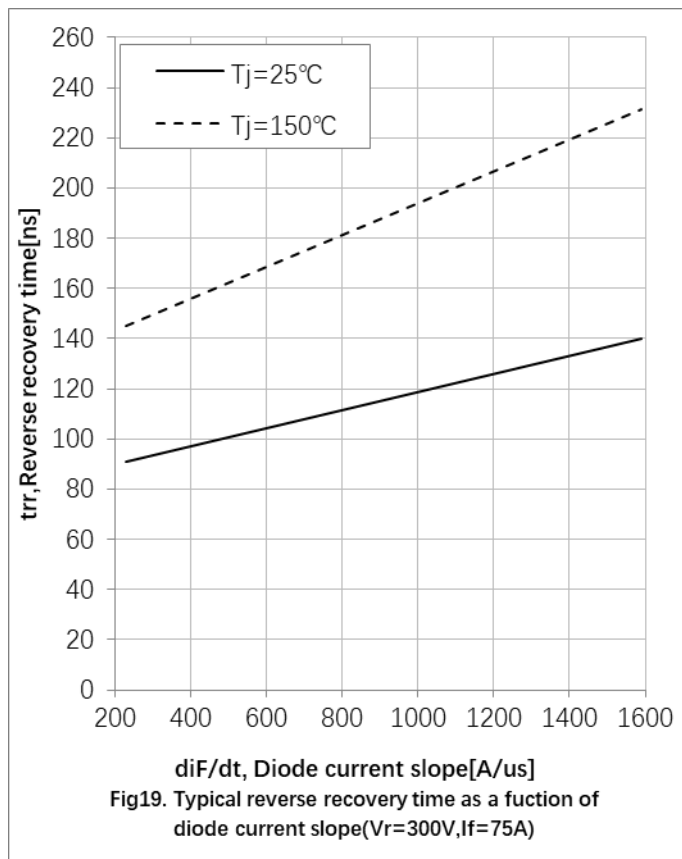
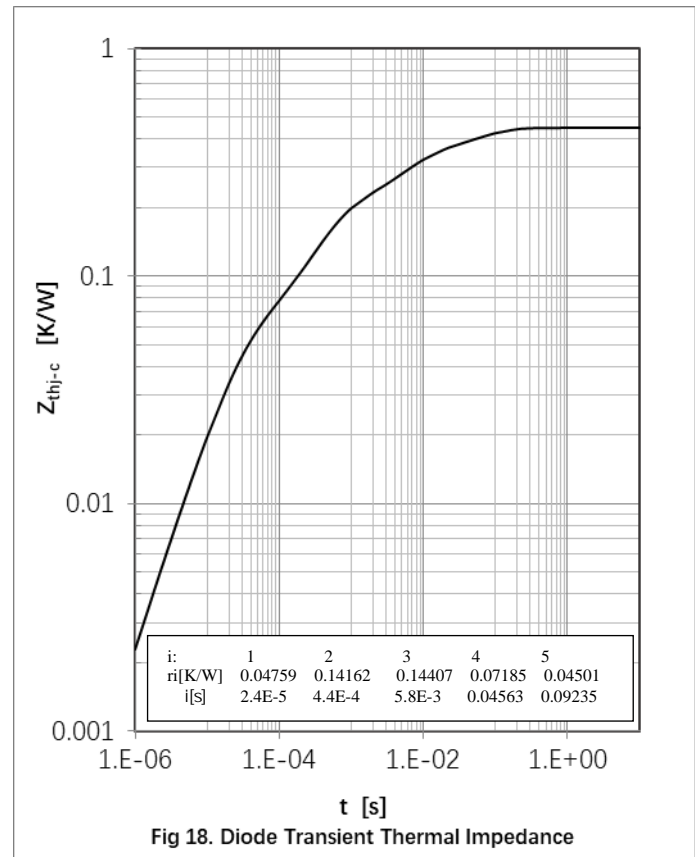
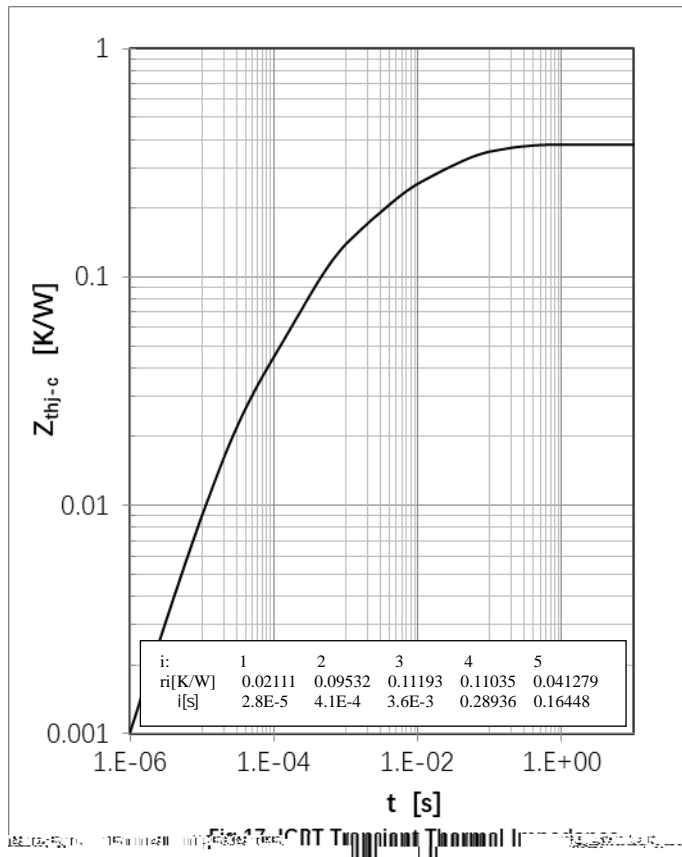


Fig19. Typical reverse recovery time as a function of diode current slope ($V_r=300V, I_f=75A$)

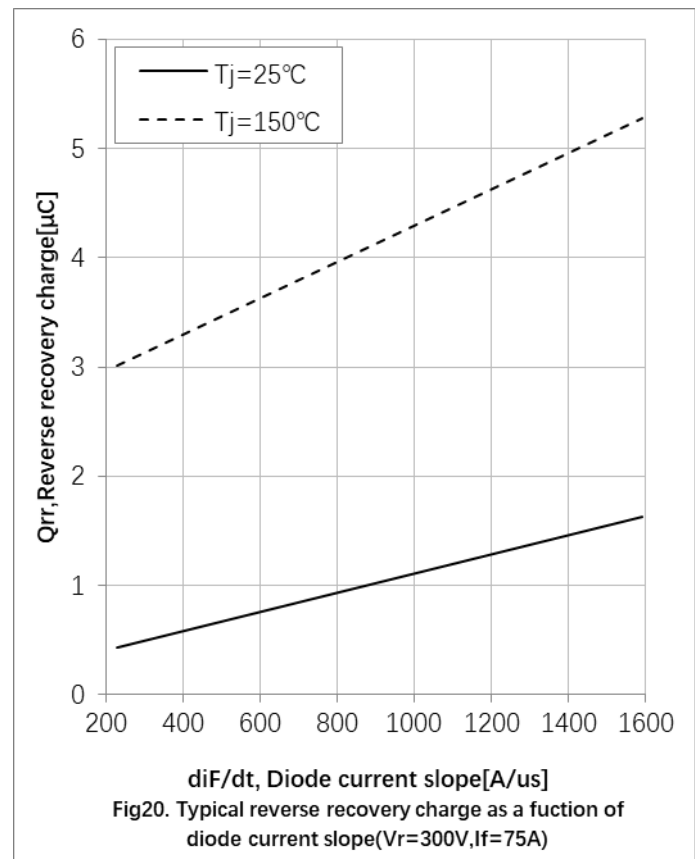


Fig20. Typical reverse recovery charge as a function of diode current slope ($V_r=300V, I_f=75A$)

