

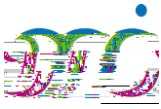




DGW40N120CTL1A1

Electrical Characteristics of the IGBT $T_j = 25$ unless otherwise specified

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
-----------	--------	------------	------	------	------	------



DGW40N120CTL1A1

Electrical Characteristics of the Diode $T_j = 25$ unless otherwise specified

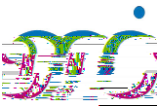
Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Static						
Diode Forward Voltage	V_F	$I_F = 40A$ $T_j = 25^\circ C,$ $T_j = 125^\circ C$ $T_j = 150^\circ C$		2.00 1.90 1.80	2.60	V



DGW40N120CTL1A1

Electrical Characteristics of the DIODE





DGW40N120CTL1A1

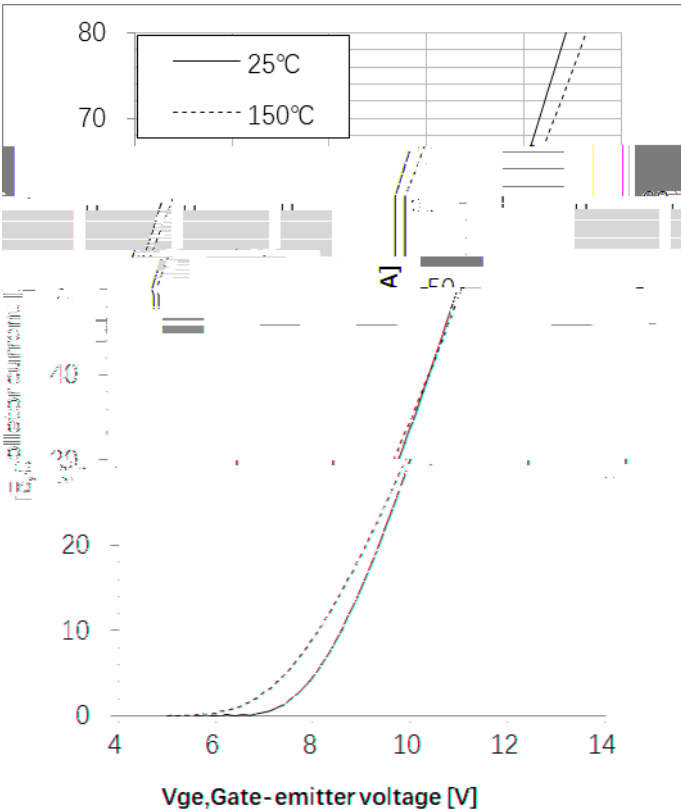


Fig5. Typical transfer characteristic ($V_{ce}=20\text{V}$)

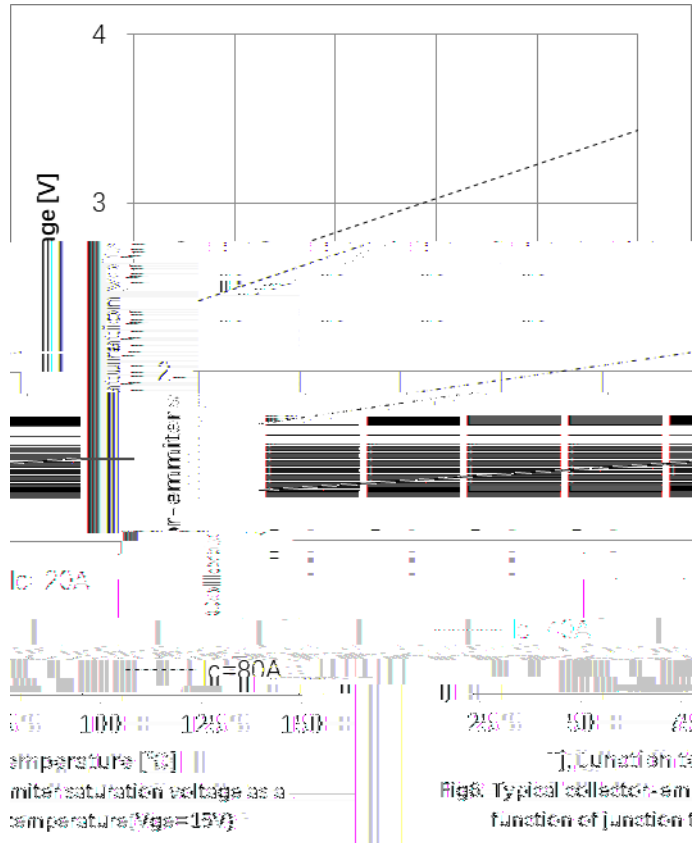
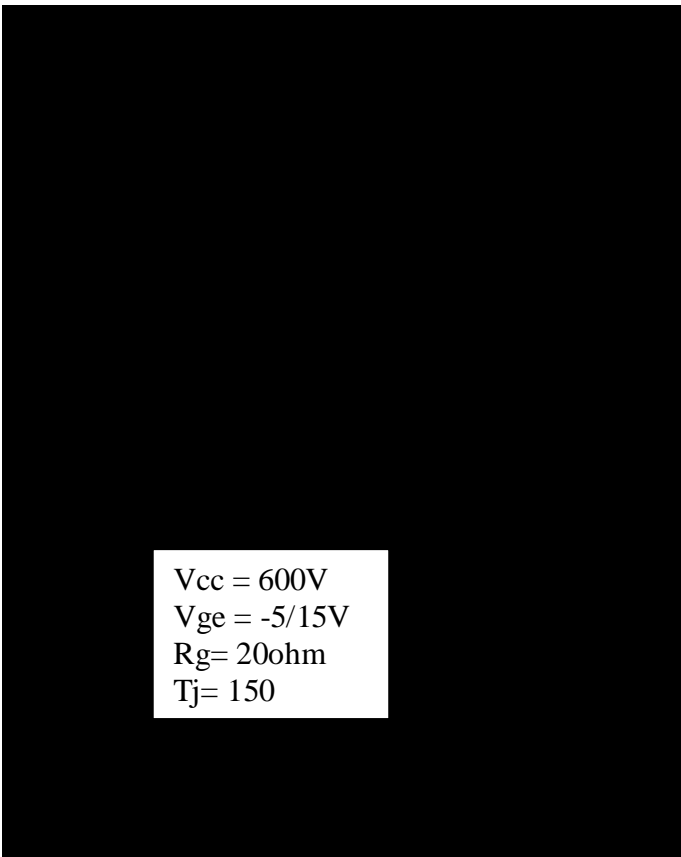
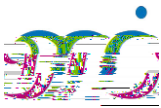


Fig6. Typical collector-emitter saturation voltage as a function of junction temperature ($V_{ge}=15\text{V}$)

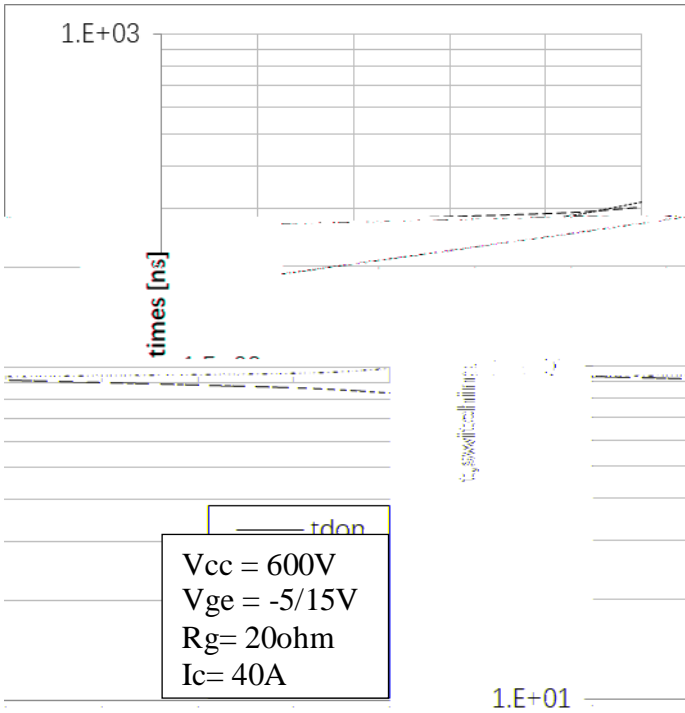


$V_{cc} = 600\text{V}$
 $V_{ge} = -5/15\text{V}$
 $I_c = 40\text{A}$
 $T_j = 150$

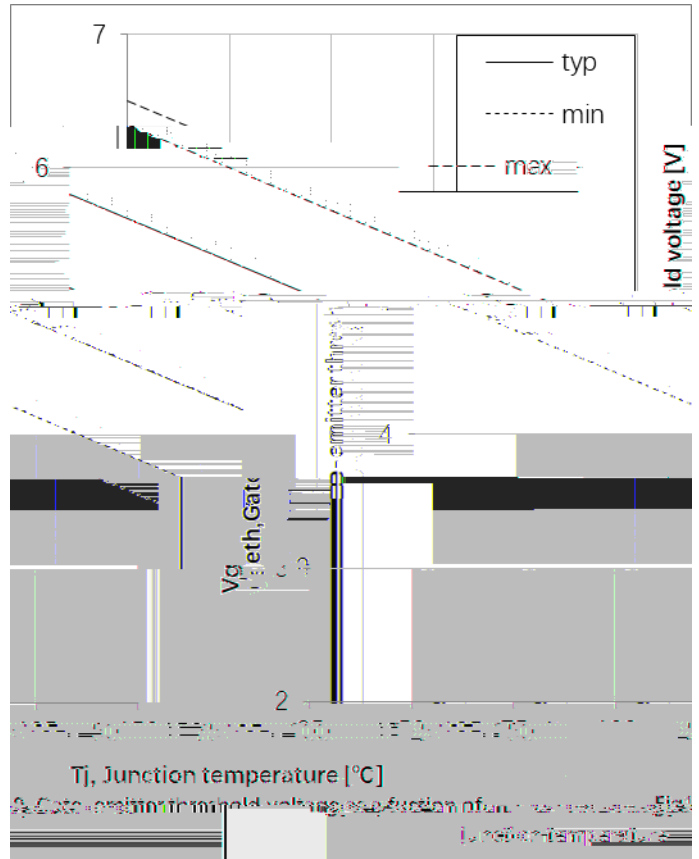
Fig7. Typical switching times as a function of gate resistance



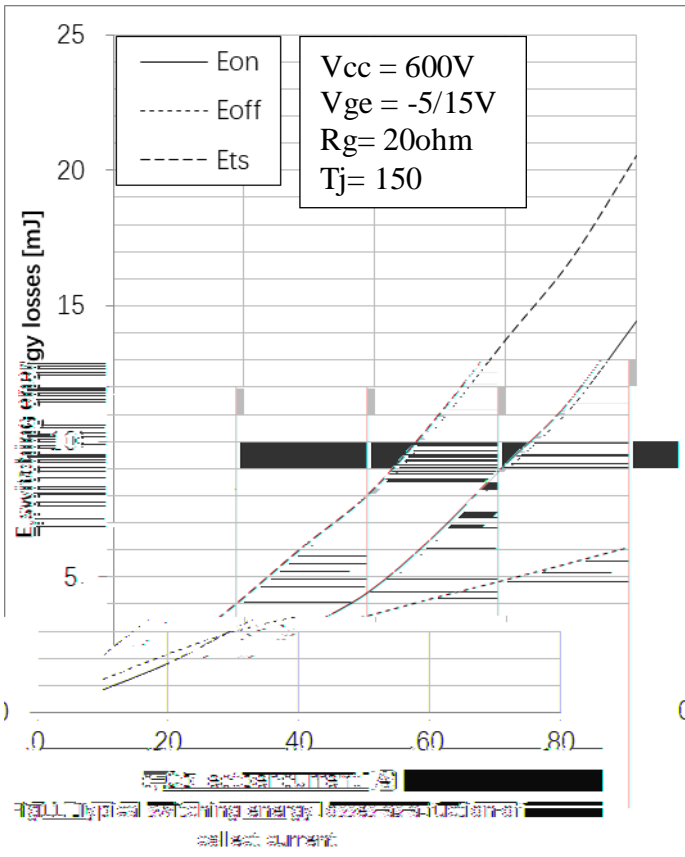
DGW40N120CTL1A1



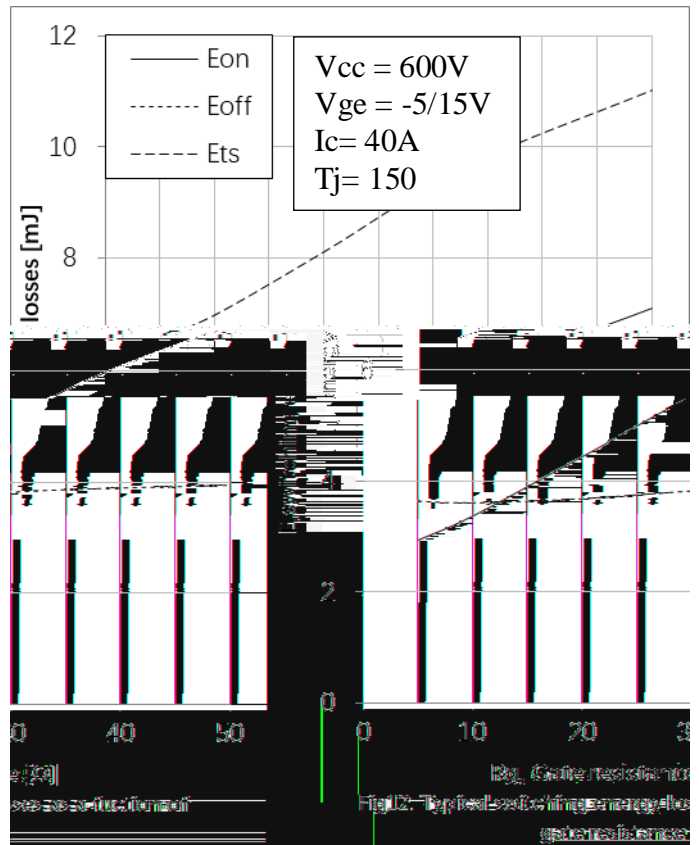
Temperature [°C]
 times as a function of junction
 temperature



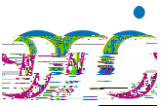
Tj, Junction temperature [°C]
 Fig9. Typical switching times as a function of junction temperature



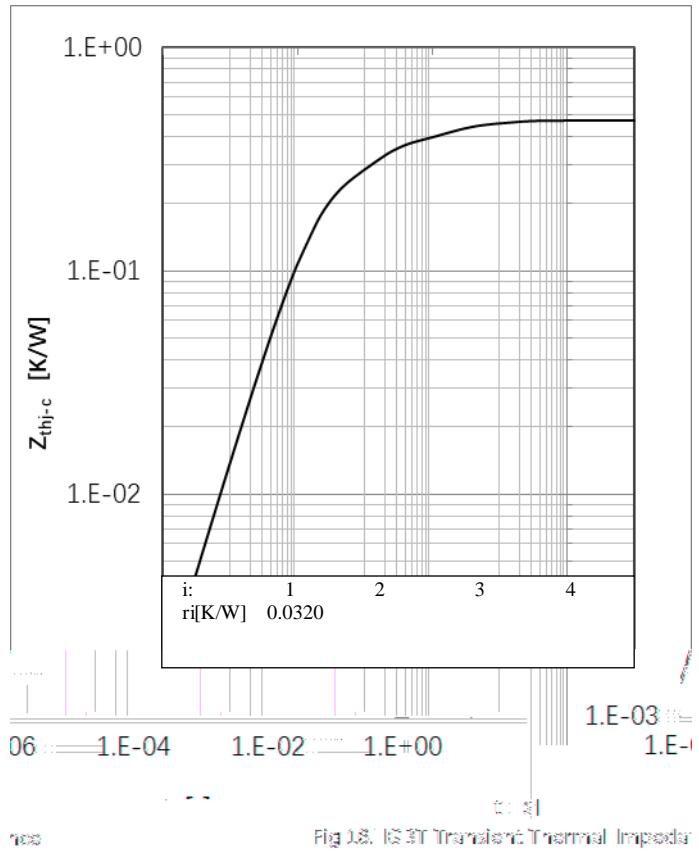
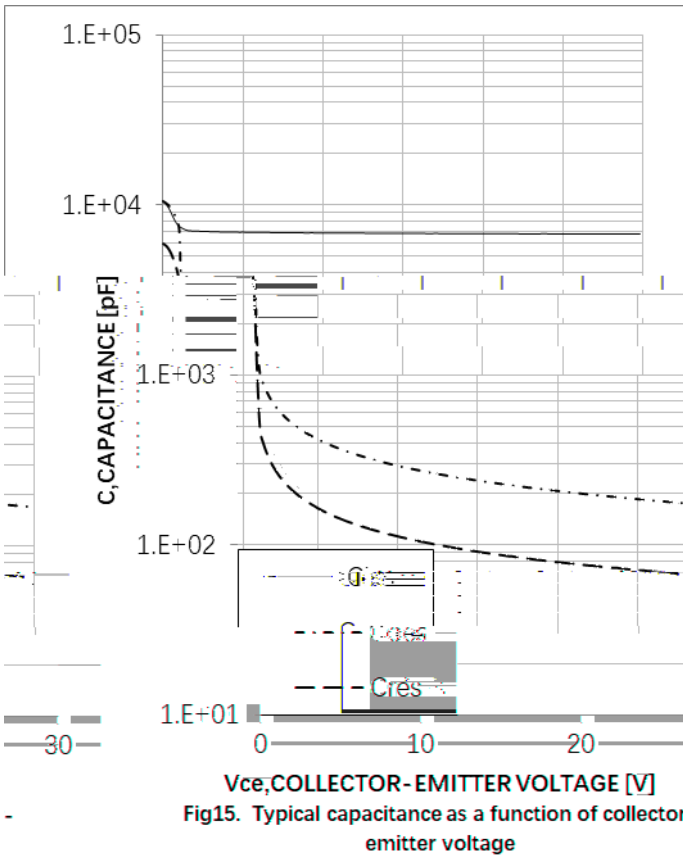
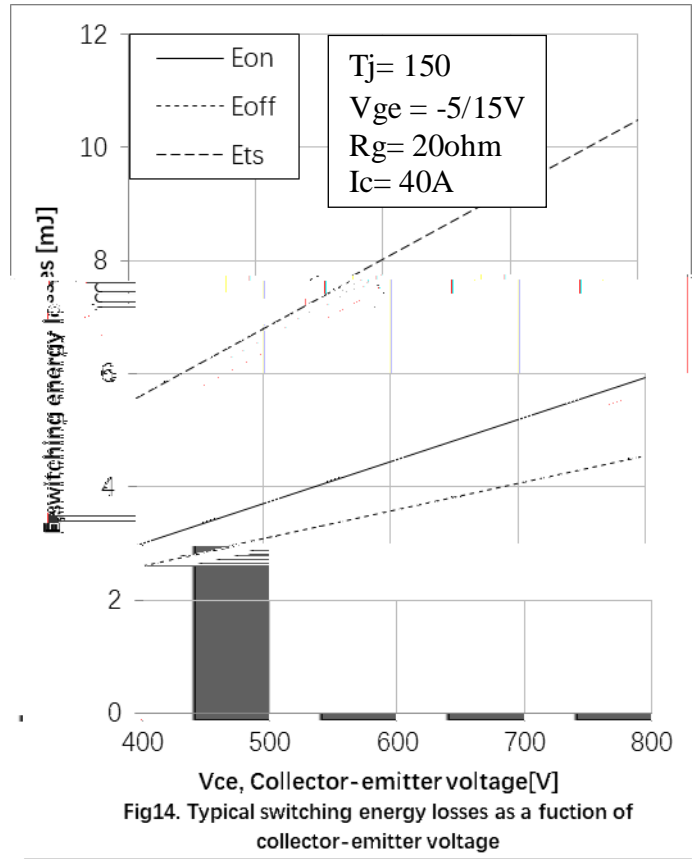
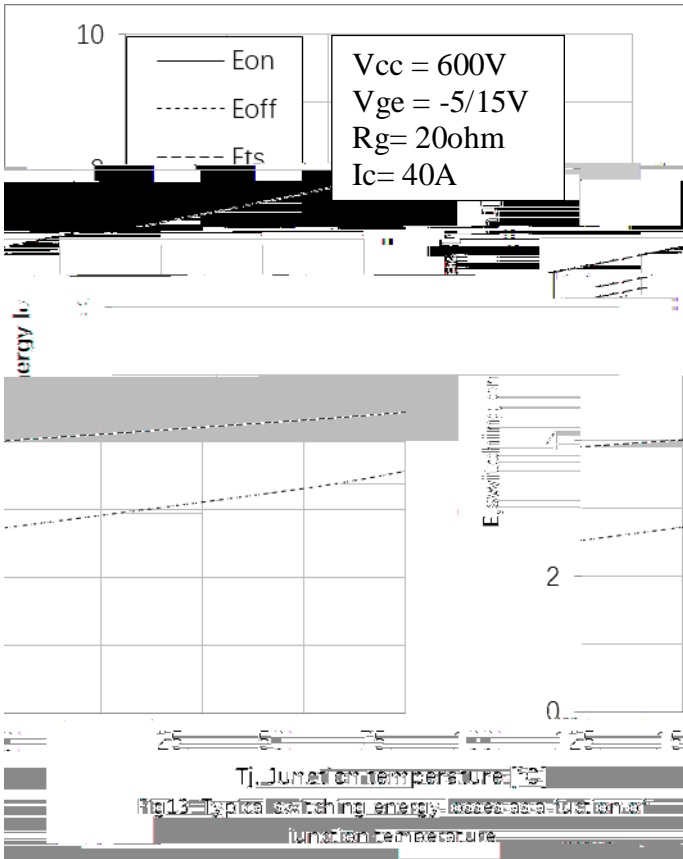
Ic [A]

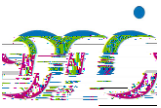


Ic [A]



DGW40N120CTL1A1





DGW40N120CTL1A1

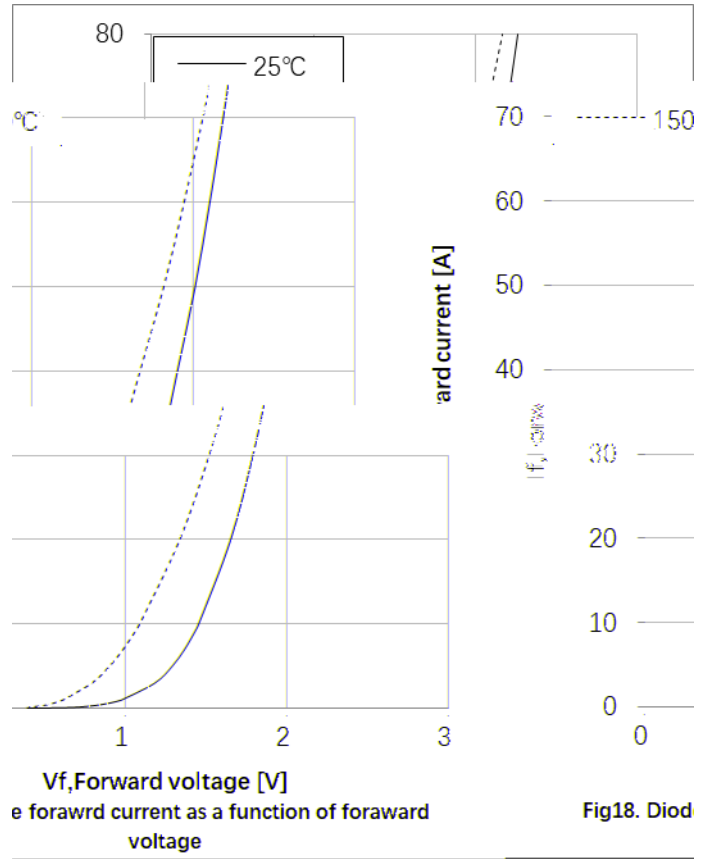
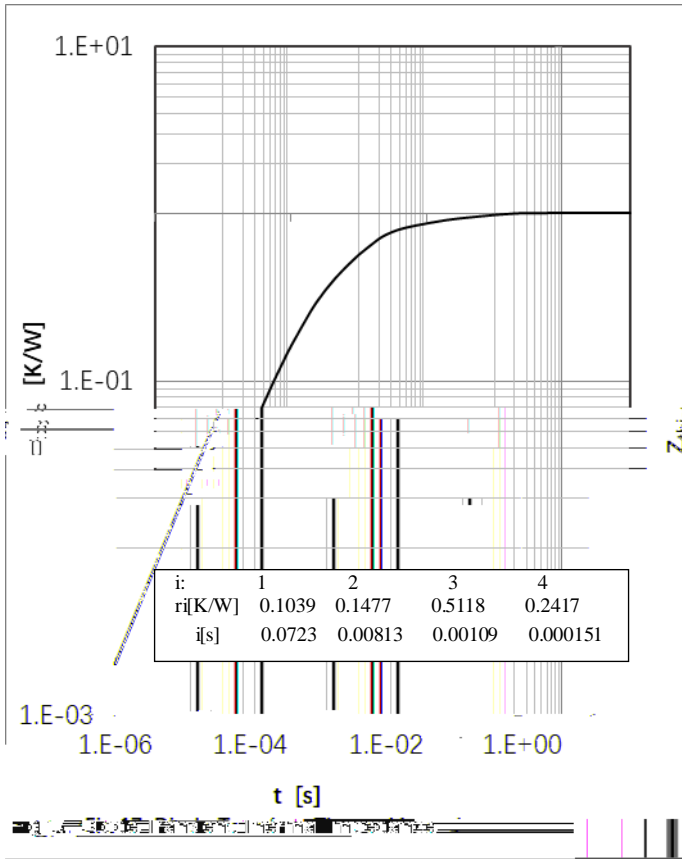


Fig18. Diode forward current as a function of forward voltage

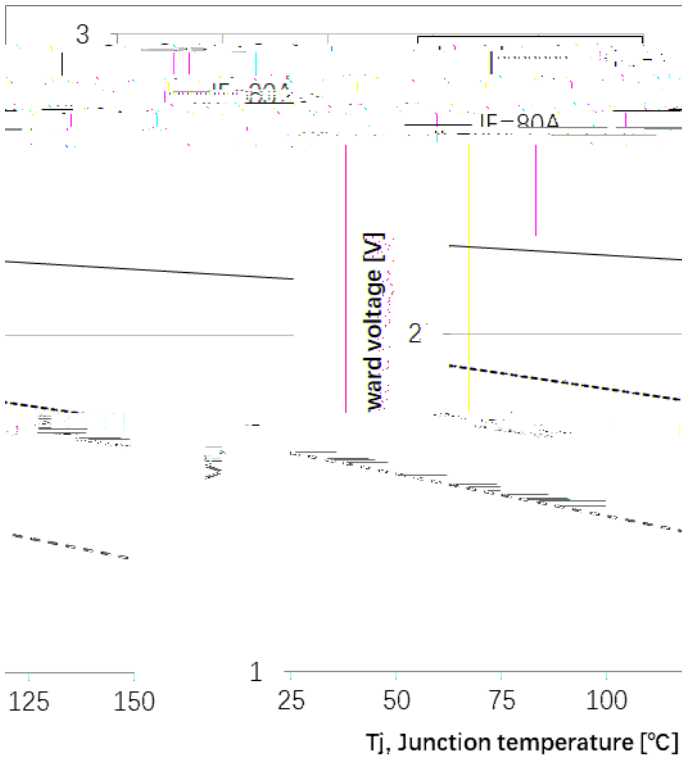


Fig19. Diode forward voltage as a function of junction temperature



DGW40N120CTL1A1



DGW40N120CTL1A1
