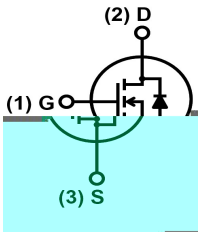
Powering the SiC evolution™

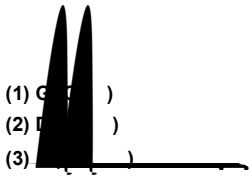
GP2 040A120U

	1200
R_D	37
$I_{D\ (\ C=25C)}$	63 A
,	175 C

F

P





B

A

P	P	M
GP2 040A120	O-247-3L	2 040A120

M R

C		C		

C

C		C				

* Pulse width is limited by Tj_{max}

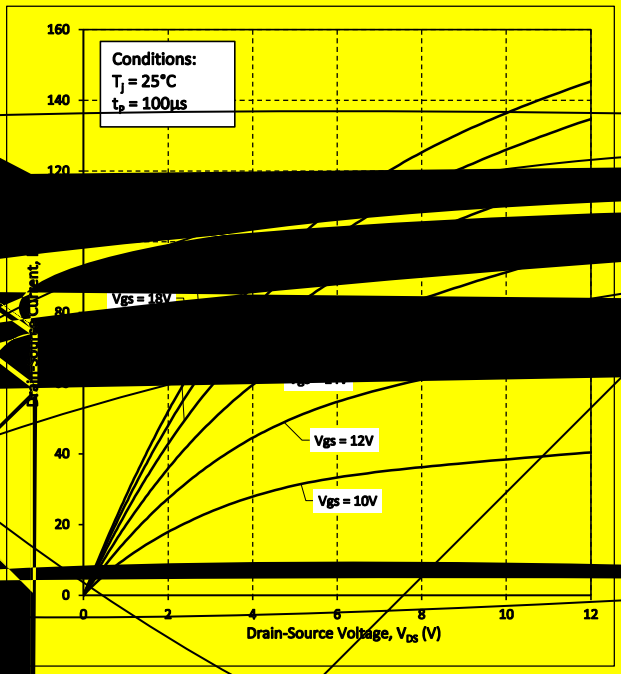
C		C				
						Ω

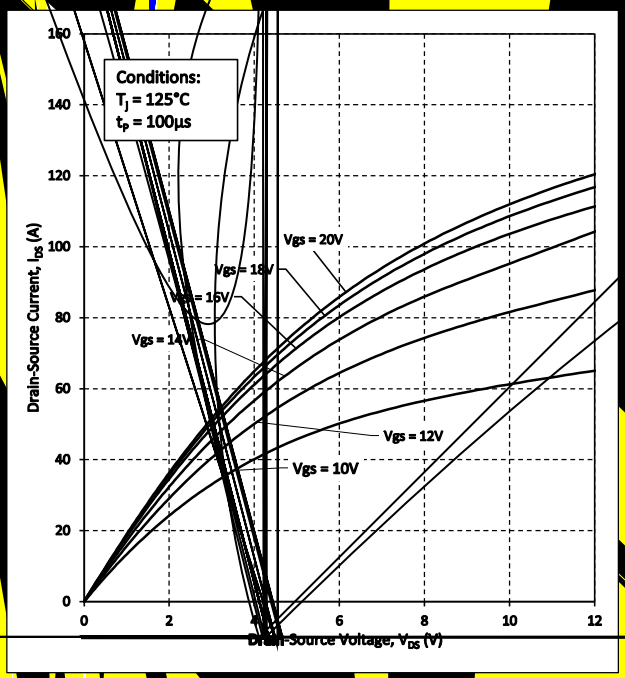
AC E C

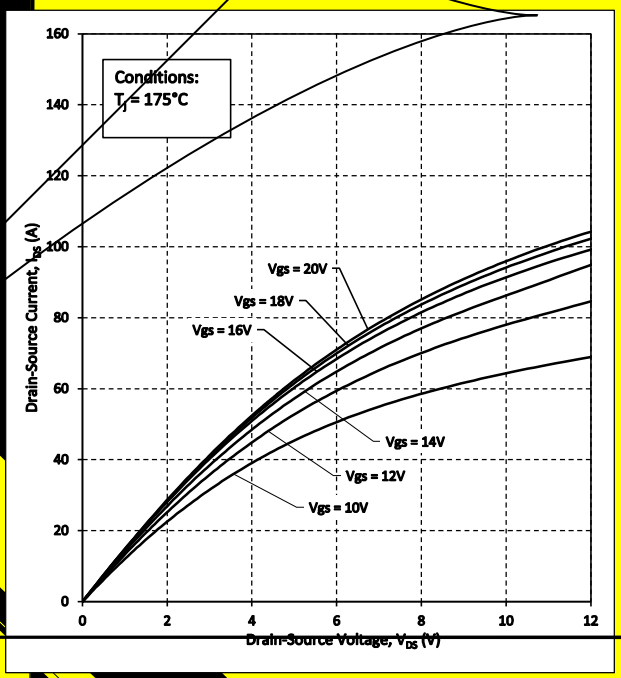
C		C				

B D C

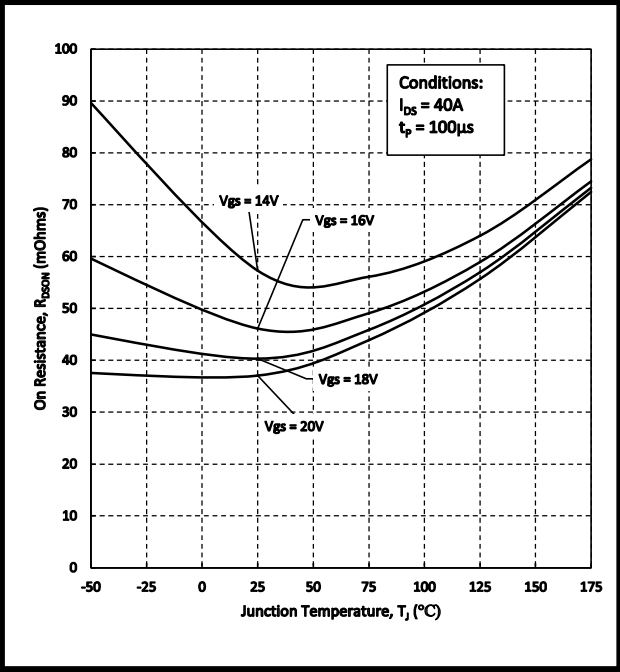
C		C				

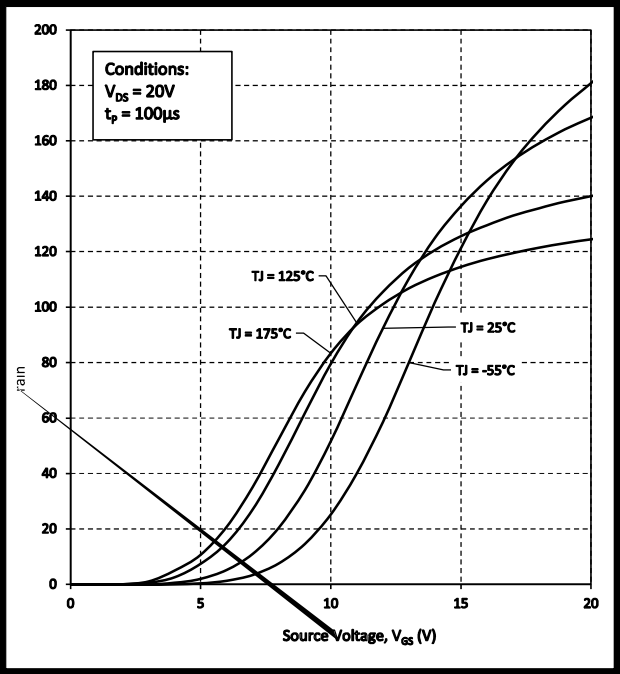

Conditions:
T_j = 25°C
t_p = 100µs
Vgs = 12V
Vgs = 10V
Drain-Source Voltage, V_{DS} (V)

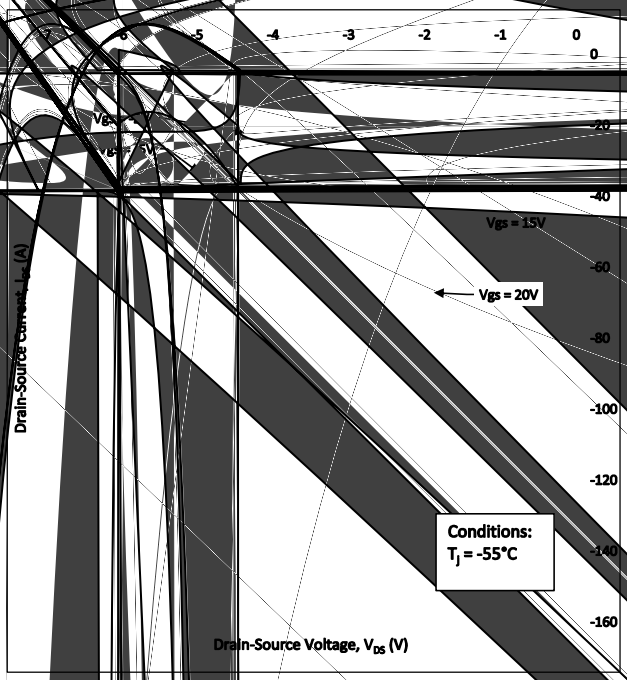

Conditions:
T_j = 125°C
t_p = 100µs
Vgs = 20V
Vgs = 18V
Vgs = 16V
Vgs = 14V
Vgs = 12V
Vgs = 10V
Drain-Source Current, I_{DS} (A)
Drain-Source Voltage, V_{DS} (V)

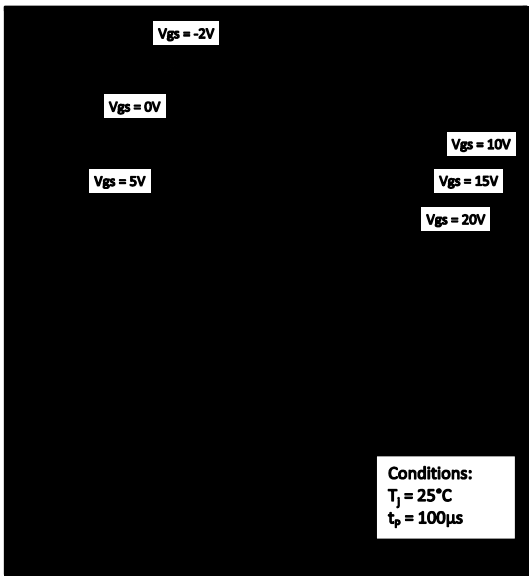

Conditions:
T_j = 175°C
Vgs = 20V
Vgs = 18V
Vgs = 16V
Vgs = 14V
Vgs = 12V
Vgs = 10V
Drain-Source Current, I_{DS} (A)
Drain-Source Voltage, V_{DS} (V)

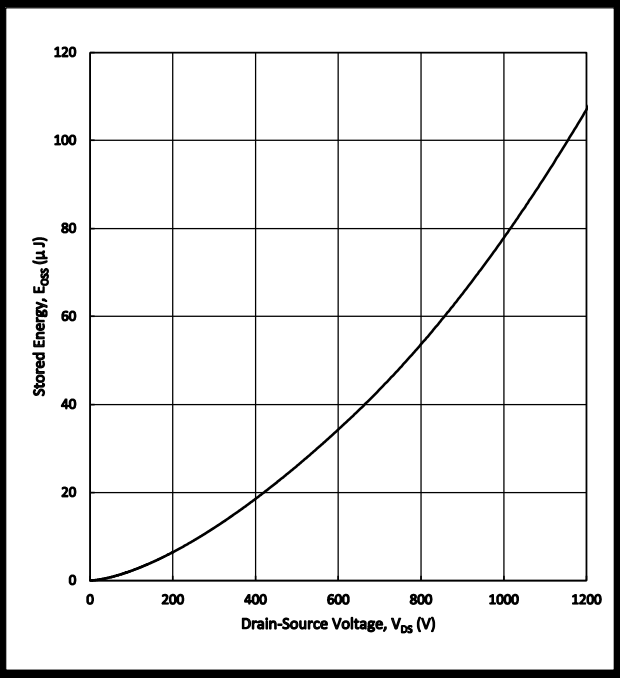
Conditions:
V_{GS} = 20V
t_p = 100µs

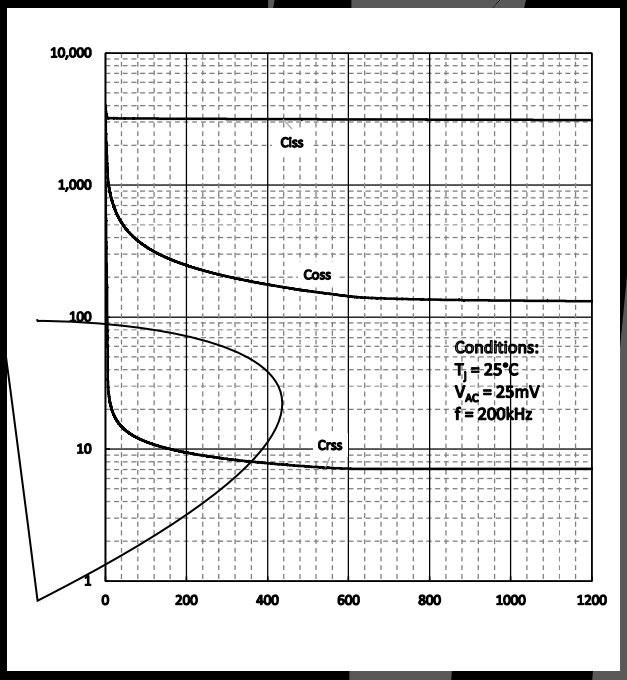


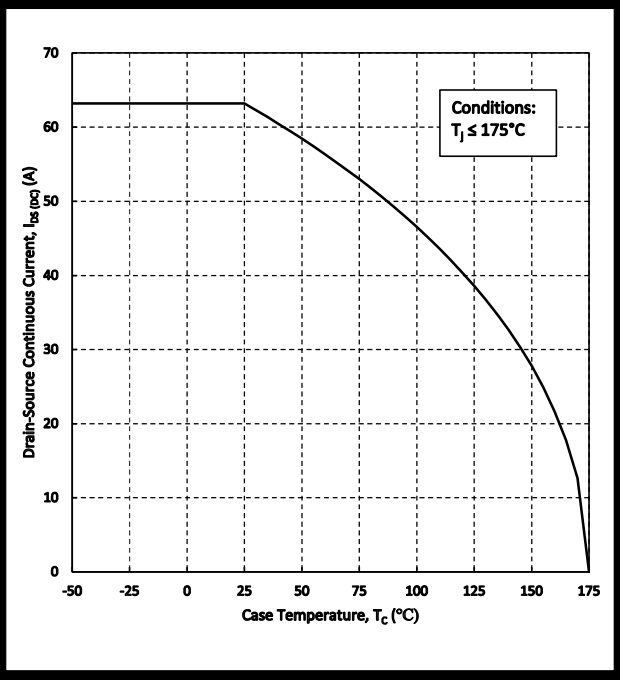


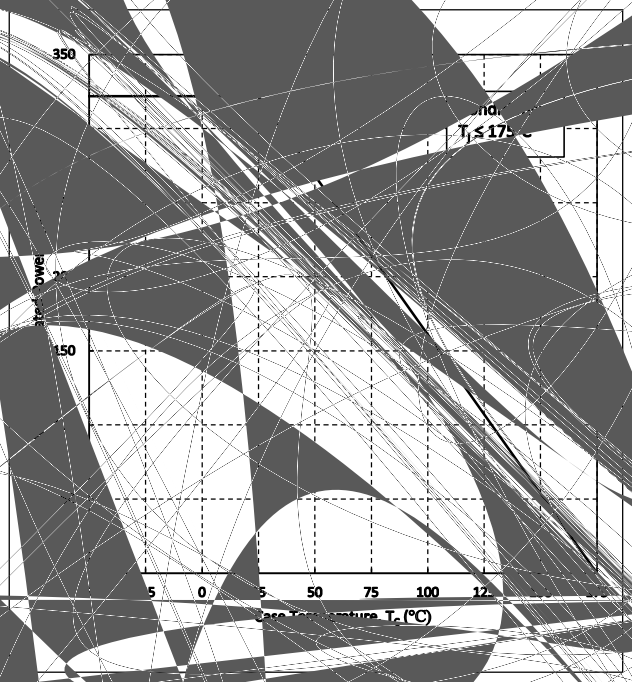

-6
-5
-4
-3
-2
-1
0
0
-20
-40
-60
-80
-100
-120
-140
-160
Vgs = 15V
Vgs = 20V
Drain-Source Current, I_{DS} (A)
Drain-Source Voltage, V_{DS} (V)
Conditions:
T_j = -55°C


Vgs = -2V
Vgs = 0V
Vgs = 5V
Vgs = 10V
Vgs = 15V
Vgs = 20V
Conditions:
T_j = 25°C
t_p = 100µs

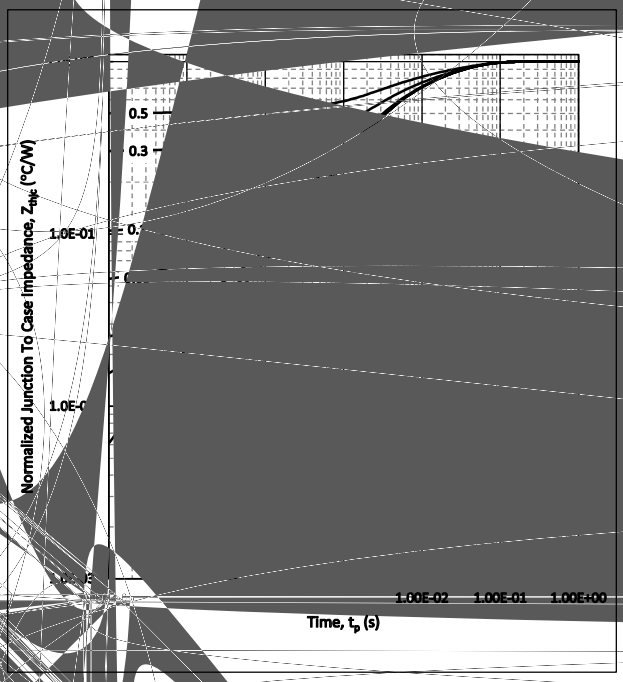

Stored Energy, E_{OSS} (µJ)
120
100
80
60
40
20
0
0
200
400
600
800
1000
1200
Drain-Source Voltage, V_{DS} (V)


10,000
1,000
100
10
1
Ciss
Coss
Crss
Conditions:
T_J = 25°C
V_{AC} = 25mV
f = 200kHz
0
200
400
600
800
1000
1200

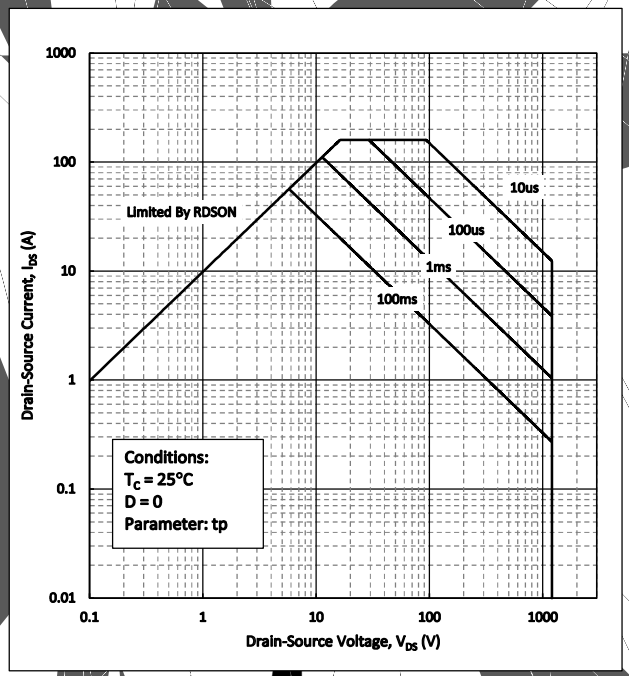

Drain-Source Continuous Current, $I_{DS\ (DC)}$ (A)
70
60
50
40
30
20
10
0
Conditions:
$T_J \leq 175°C$
-50
-25
0
25
50
75
100
125
150
175
Case Temperature, T_C (°C)



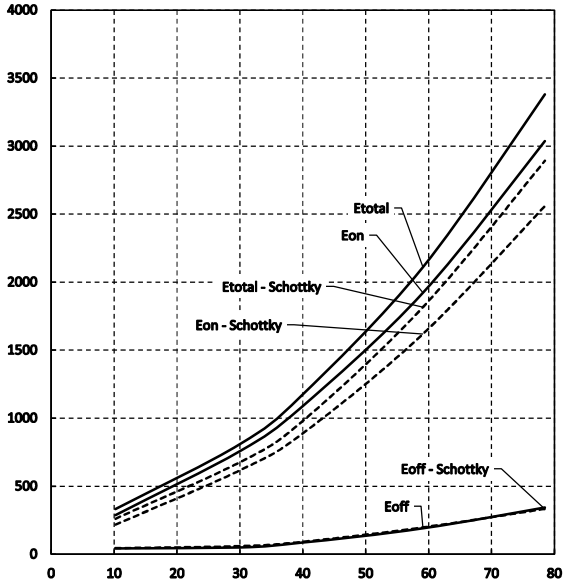
F [illegible] 17. M [illegible] P D [illegible] D



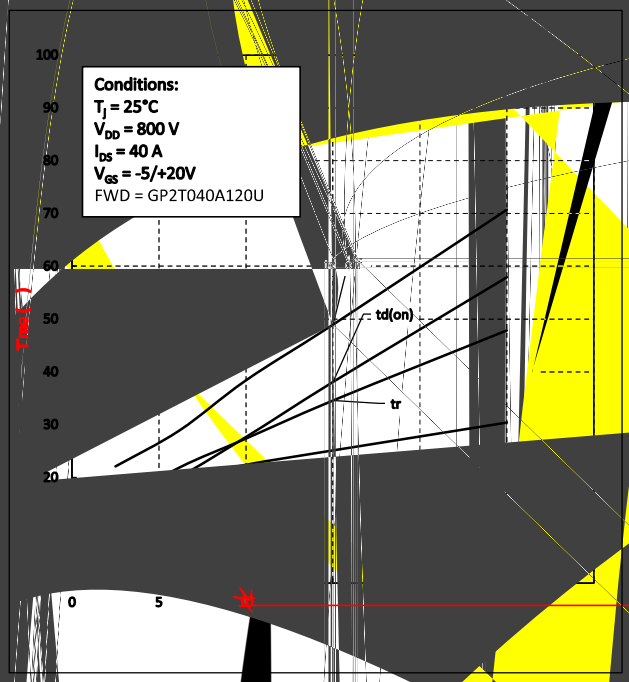
F [illegible] 18. [illegible]

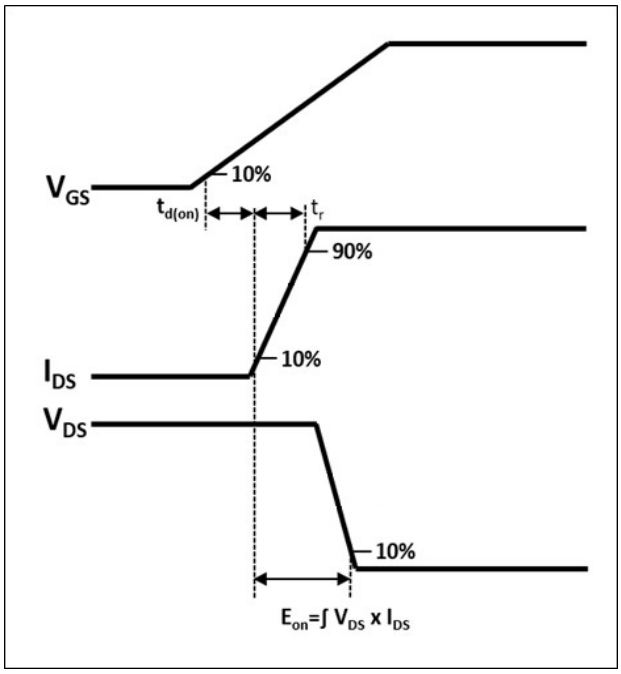


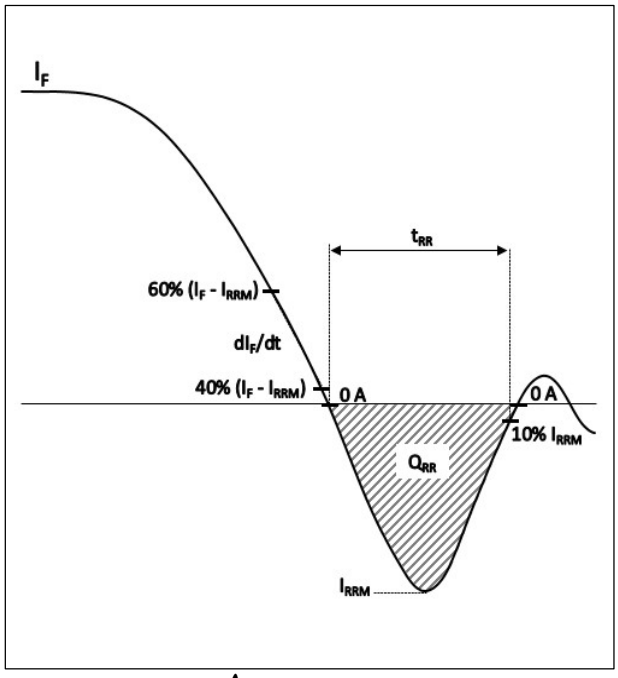
F [illegible] 19. [illegible] O [illegible] A [illegible]



F [illegible] 20. [illegible] E [illegible]

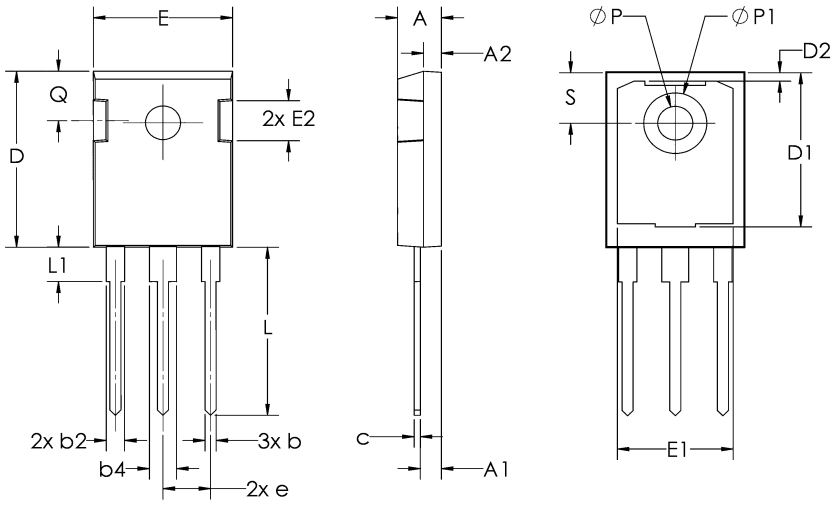

Conditions:
T_J = 25°C
V_{DD} = 800 V
I_{DS} = 40 A
V_{GS} = -5/+20V
FWD = GP2T040A120U
Time (ns)
td(on)
tr
100
90
80
70
60
50
40
30
20
0
5





F 25. - D **F 26. R R D**

P D O-247-3L



	M		I	
	M	M	M	M

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