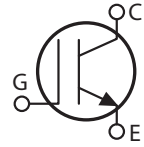
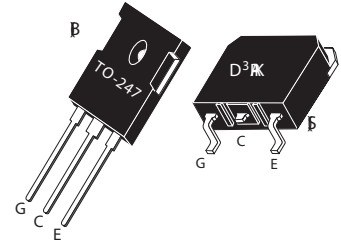




1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100.



| Symbol | Parameter Name | Value | Unit |
|----------|---------------------------|-------|------|
| V_{CE} | Collector-Emitter Voltage | 1200 | V |
| V_{BE} | Base-Emitter Voltage | 1.2 | V |
| I_C | Collector Current | 15 | A |
| I_E | Emitter Current | 15 | A |
| I_{M1} | Maximum Base Current | 1.5 | A |
| β | DC Current Gain | 100 | |
| P_D | Power Dissipation | 120 | W |
| T_{JT} | Storage Time | 10 | ns |
| T_L | Turn-off Time | 10 | ns |

| Symbol | Parameter Name | Value | Unit |
|----------|----------------------|-------|------|
| V_{BE} | Base-Emitter Voltage | 1.2 | V |
| V_{BE} | Base-Emitter Voltage | 1.2 | V |
| V_{BE} | Base-Emitter Voltage | 1.2 | V |
| I_E | Emitter Current | 15 | A |
| I_E | Emitter Current | 15 | A |
| I_E | Emitter Current | 15 | A |



■

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| தர | க | க | M | P | M | N |
|----------|-------|-----------------------------------------------------|---|---|---|---|
| C_B | ந | V_B ஃ
E ஃ | | 0 | | ப |
| C_B | ந | | | 0 | | |
| C_B | ந | | | 5 | | |
| V_B | ந | V_B ஃ
V_E ஃ
I_C ஃ | | 0 | | V |
| Q_g | ந 3 | | | 0 | | க |
| Q_g | ந | | | 0 | | |
| Q_g | ந | | | 0 | | |
| ம | ந | T_J ஃ
G ஃ
E ஃ | 5 | | | A |
| t_B | ந | V_C ஃ
V_B ஃ
I_C ஃ
R_G ஃ
T_J ஃ | | 0 | | க |
| t_r | ந | | | 1 | | |
| t_{th} | ந ந | | | 8 | | |
| t_f | ந | | | 3 | | μ |
| E_b | ந 4 | | | 8 | | |
| E_b | ந 5 | | | 0 | | |
| E_{ff} | ந ந 6 | | 0 | | | |
| t_B | ந | V_C ஃ
V_B ஃ
I_C ஃ
R_G ஃ
T_J ஃ | | 0 | | க |
| t_r | ந | | | 1 | | |
| t_{th} | ந ந | | | 9 | | |
| t_f | ந | | | 2 | | μ |
| E_b | ந 4 | | | 0 | | |
| E_b | ந 5 | | | 0 | | |
| E_{ff} | ந ந 6 | | 0 | | | |

■

| தர | க | M | P | M | N |
|----------------|---|---|---|---|----|
| $R_{\theta C}$ | ந | | | 0 | XV |
| $R_{\theta C}$ | ந | | | 1 | |
| W_T | ந | | 9 | | 9 |

① ந

② ந

③ ந

④ E_b ந

⑤ E_b ந

⑥ E_{ff} ந

⑦

⑧

⑨

⑩

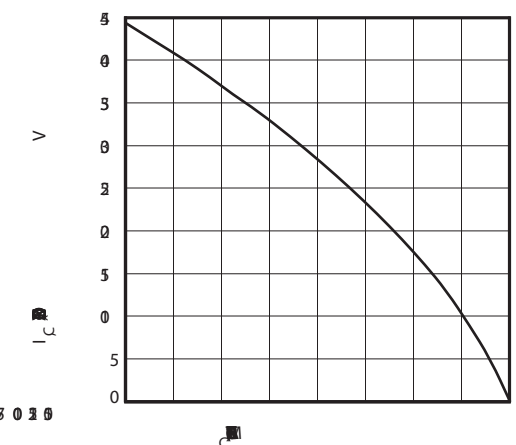
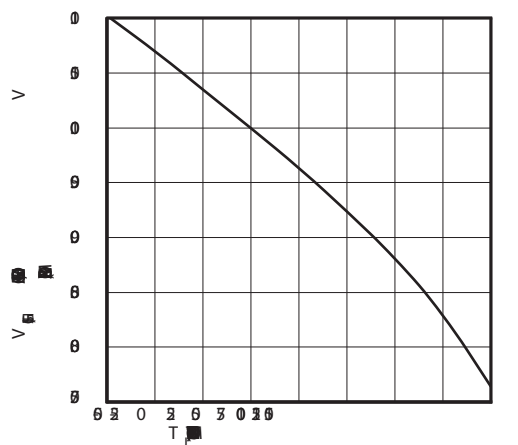
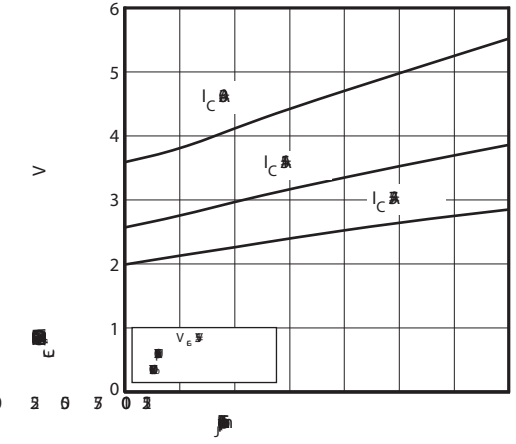
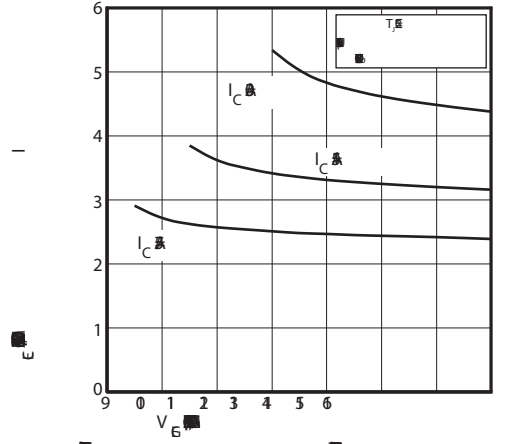
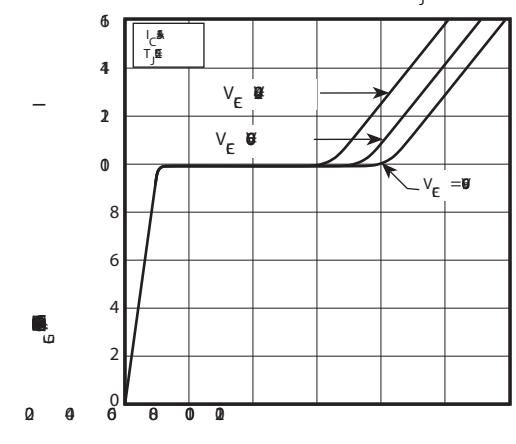
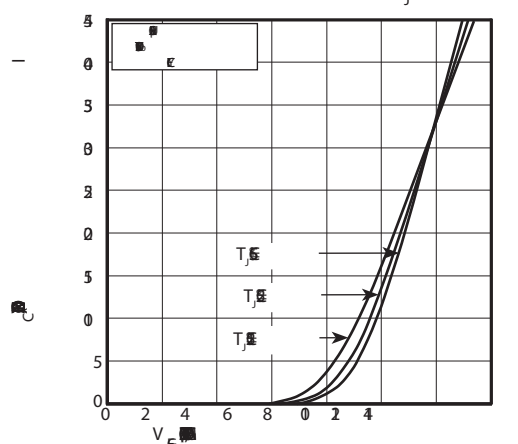
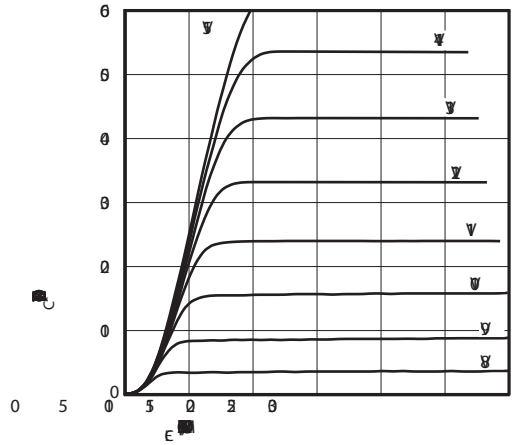
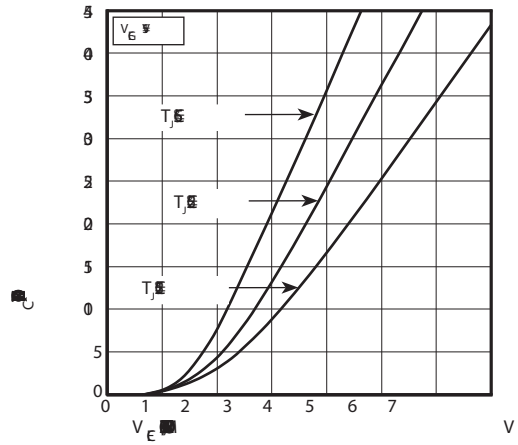
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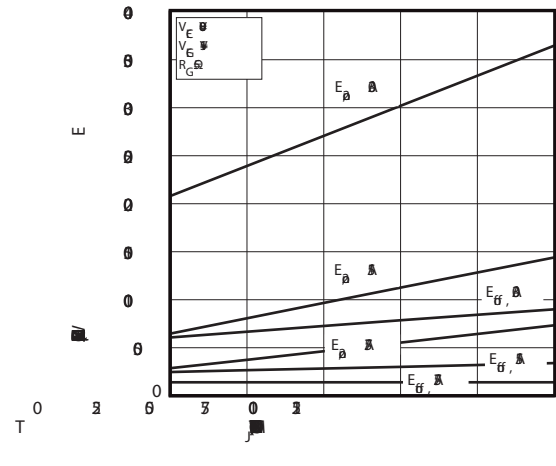
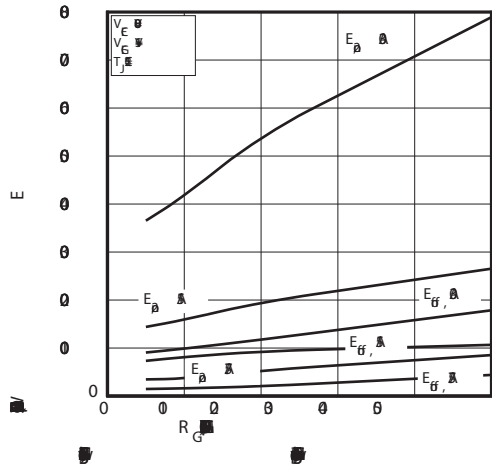
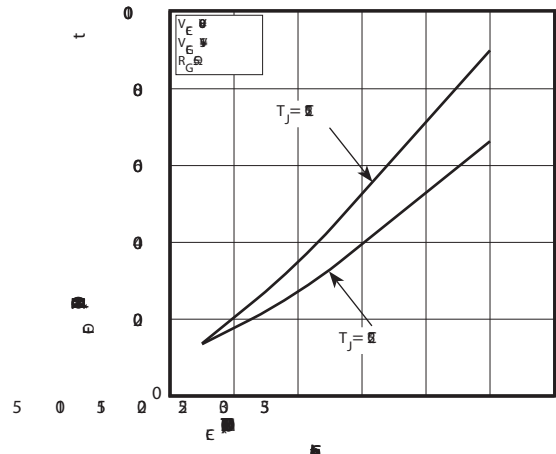
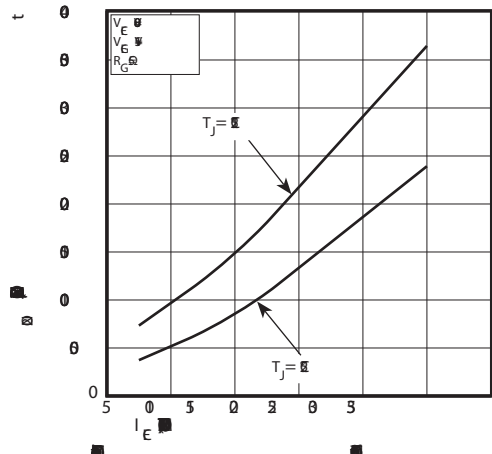
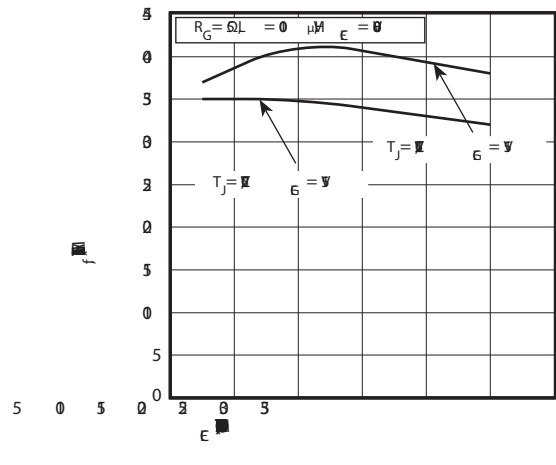
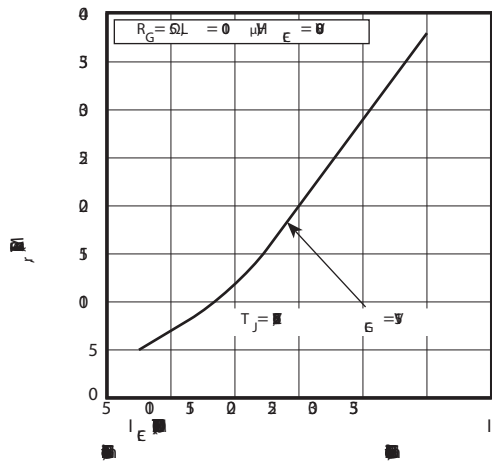
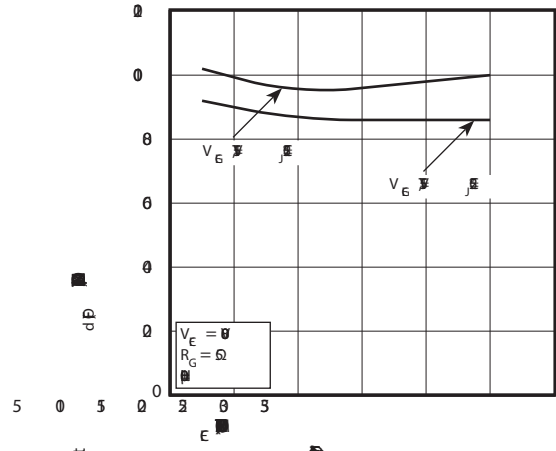
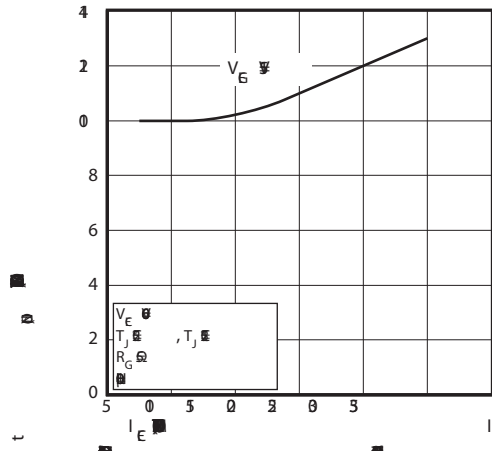
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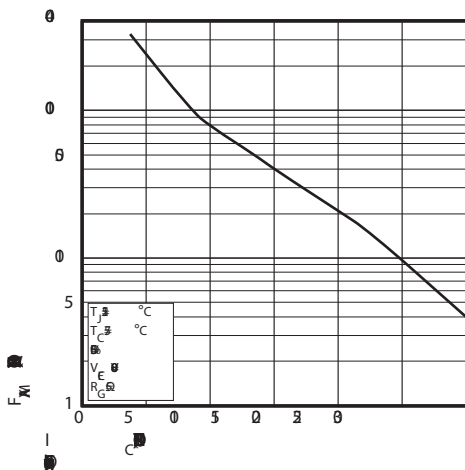
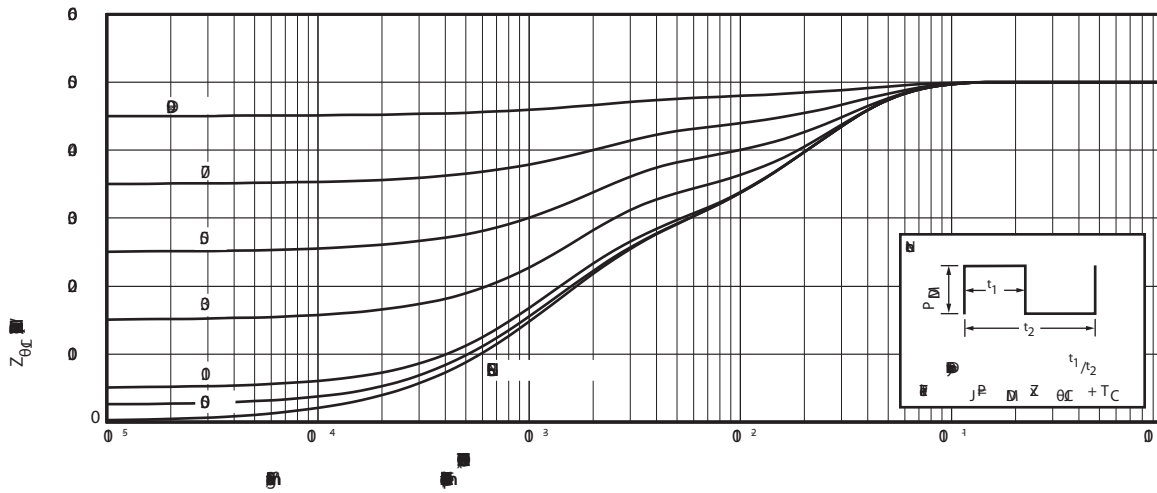
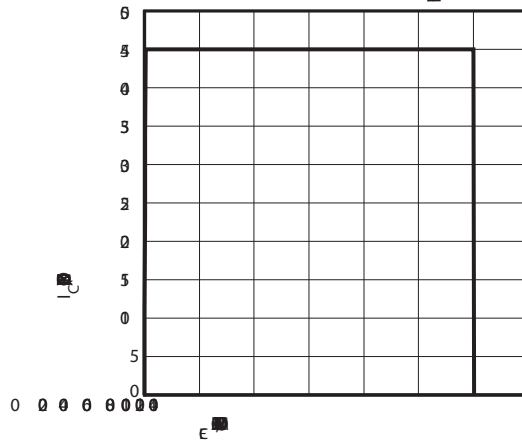
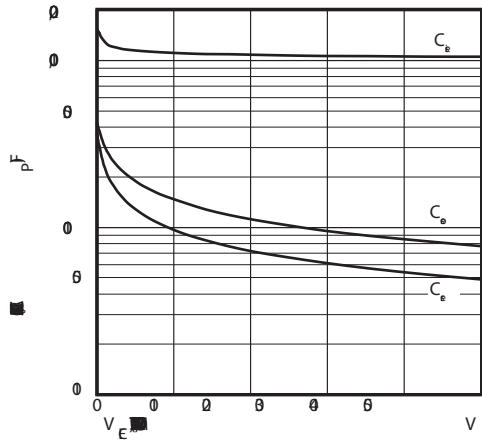
⑬

⑭

⑮







$$F_{an} = f(n, \dots, f_{an})$$

$$f_{an} = \frac{\theta}{t \dots r \dots \beta \dots f}$$

$$f_{an} = \frac{P_{ai} P_d}{E_a E_b}$$

$$P_{ai} = \frac{T_J T_c}{R_{\theta C}}$$

