|  |  |  |  |
| --- | --- | --- | --- |
| **BC327 PNP** | **BC337 NPN** | **BC517 NPN** | **BC547 NPN** |
|  |  |  |  |
| **Amplifier Silicon Transistor** | **Amplifier Silicon Transistor** | **Darlington Silicon Transistor** | **Switching / Amplifier Applications** |
| VCES = **-50 V** fT = **Typ. 260 MHz**  VCE0 = **-45 V** VBE(on) = **-1.2 V**  VEBO = **-5 V** PD(TA)= **625 mW**  IC = **-800 mA** TSTG = **-55 ~ 150 °C**  **hFE = 100 min. / 630 max.** | VCBO = **50 V** fT = **Typ. 210 MHz**  VCE0 = **45 V** VBE(sat) = **0.7 V**  VEBO = **5 V** PD(TA)= **625 mW**  IC = **800 mA** TSTG = **-55 ~ 150 °C**  hFE = **100 min. / 630 max.** | VCB = **40 V** fT = **Typ. 200 MHz**  VCES = **30 V** VBE(sat) = **1.0 V**  VEB = **10 V** PD(TA)= **625 mW**  IC = **1.0 A** TSTG = **-55 ~ 150 °C**  hFE = **30,000 min.** | VCB0 = **50 V** fT = **Typ. 300 MHz**  VCE0 = **45 V** VBE(sat) = **0.7 V**  VEB0 = **6 V** PC = **500 mW**  IC = **100 mA** TSTG = **-65 ~ 150 °C**  hFE = **110 min. / 800 max.** |
| **BC548 NPN** | **BC549 NPN** | **BC550 NPN** | **BC556 PNP** |
|  |  |  |  |
| **Switching / Amplifier Applications** | **Switching / Amplifier Applications** | **Switching / Amplifier Applications** | **Amplifier Silicon Transistor** |
| VCBO = **30 V** fT = **Typ. 300 MHz**  VCE0 = **30 V** NF= **2 - 10 dB**  VEBO = **5 V** PC= **500 mW**  IC = **100 mA** TSTG = **-65 ~ 150 °C**  hFE = **110 min. / 800 max.** | VCBO = **30 V** fT = **Typ. 300 MHz**  VCE0 = **30 V** NF= **1.2 - 4 dB**  VEBO = **5 V** PC= **500 mW**  IC = **100 mA** TSTG = **-65 ~ 150 °C**  hFE = **110 min. / 800 max.** | VCBO = **50 V** fT = **Typ. 300 MHz**  VCE0 = **45 V** VBE(sat) = **0.7 V**  VEBO = **5 V** PC= **500 mW**  IC = **100 mA** TSTG = **-65 ~ 150 °C**  hFE = **110 min. / 800 max.** | VCBO = **-80 V** fT = **Typ. 280 MHz**  VCE0 = **-65 V** VBE(sat) = **-0.7 V**  VEBO = **-5 V** PD(TA)= **625 mW**  IC = **-100 mA** TSTG = **-55 ~ 150 °C**  hFE = **75 min. / 475 max.** |
| **BC556 PNP** | **BC558 PNP** | **2N2222A NPN** | **2N3904 NPN** |
|  |  |  |  |
| **Amplifier Silicon Transistor** | **Amplifier Silicon Transistor** | **Linear Amp. / Switching** | **General Purpose Silicon Transistor** |
| VCBO = **-50 V** fT = **Typ. 320 MHz**  VCE0 = **-45 V** VBE(sat) = **-0.7 V**  VEBO = **-5 V** PD(TA)= **625 mW**  IC = **-100 mA** TSTG = **-55 ~ 150 °C**  hFE = **75 min. / 800 max.** | VCBO = **-30 V** fT = **Typ. 360 MHz**  VCE0 = **-30 V** VBE(sat) = **-0.7 V**  VEBO = **-5 V** PD(TA)= **625 mW**  IC = **-100 mA** TSTG = **-55 ~ 150 °C**  hFE = **75 min. / 800 max.** | VCBO = **75 V** fT = **Max. 300 MHz**  VCE0 = **40 V** VBE(sat) = **1.2 V**  VEBO = **6 V** PC= **625 mW**  IC = **600 mA** TSTG = **-55 ~ 150 °C**  hFE = **100 min. / 300 max.** | VCBO = **60 V** fT = **Max. 300 MHz**  VCE0 = **40 V** VBE(sat) = **0.85 V**  VEBO = **6 V** PD(TA) = **625 mW**  IC = **200 mA** TSTG = **-55 ~ 150 °C**  hFE = **100 min. / 300 max.** |
| **2N3906 PNP** | **2N5401 PNP** | **2N5551 NPN** | **A1015 PNP** |
|  |  |  |  |
| **General Purpose Silicon Transistor** | **Amplifier Silicon Transistor** | **Amplifier Silicon Transistor** | **Low-Frequency Amplifier** |
| VCBO = **40 V** fT = **Typ. 250 MHz**  VCE0 = **40 V** VBE(sat) = **0.85 V**  VEBO = **5 V** PD(TA)= **625 mW**  IC = **200 mA** TSTG = **-55 ~ 150 °C**  hFE = **100 min. / 300 max.** | VCBO = **160 V** fT = **100 - 300 MHz**  VCE0 = **150 V** VBE(sat) = **1.0 V**  VEBO = **5 V** PD(TA)= **625 mW**  IC = **600 mA** TSTG = **-55 ~ 150 °C**  hFE = **60 min. / 240 max.** | VCBO = **180 V** fT = **100 - 300 MHz**  VCE0 = **160 V** VBE(sat) = **1.0 V**  VEBO = **6 V** PD(TA) = **625 mW**  IC = **600 mA** TSTG = **-55 ~ 150 °C**  hFE = **80 min. / 250 max.** | VCBO = **-50 V** fT = **Min. 80 MHz**  VCE0 = **-50 V** VBE(sat) = **-1.1 V**  VEBO = **-5 V** PD(TA)= **400 mW**  IC = **-150 mA** TSTG = **-55 ~ 150 °C**  hFE = **70 min. / 400 max.** |
| **A733 PNP** | **C1815 NPN** | **C945 NPN** | **SS8050 NPN** |
|  |  |  |  |
| **General Purpose Amplifier** | **Audio Frequency A. / High Frequency Osc.** | **General Purpose Transistor** | **Class B Push-Pull / Epitaxial S. Transistor** |
| V(BR)CBO = **-60 V** fT = **50 - 180 MHz**  V(BR)CE0 = **-50 V** VBE(sat) = **-1.0 V**  V(BR)EBO = **-5 V** PC = **250 mW**  IC = **-150 mA** TSTG = **-55 ~ 150 °C**  hFE = **90 min. / 200 typ. / 600 max.** | VCBO = **60 V** fT = **Min. 800 MHz**  VCE0 = **50 V** VBE(sat) = **1.0 V**  VEBO = **5 V** PC= **400 mW**  IC = **150 mA** TSTG = **-55 ~ 150 °C**  hFE = **70 min. / 700 max.** | V(BR)CBO = **60 V** fT = **Min. 150 MHz**  V(BR)CE0 = **50 V** VBE(sat) = **1.0 V**  V(BR)EBO = **5 V** PC= **400 mW**  IC = **150 mA** TSTG = **-55 ~ 150 °C**  hFE = **70 min. / 700 max.** | VCBO = **40 V** fT = **Min. 100 MHz**  VCE0 = **25 V** VBE(sat) = **1.2 V**  VEBO = **6 V** PD = **1 W**  IC = **1.5 A** TSTG = **-65 ~ 150 °C**  hFE = **85 min. / 300 max.** |

|  |  |  |  |
| --- | --- | --- | --- |
| **SS8550 PNP** | **S8050 NPN** | **S8550 PNP** | **S9012 PNP** |
|  |  |  |  |
| **Class B Push-Pull / Epitaxial S. Transistor** | **Class B Push-Pull A.A. / General Purpose** | **Class B Push-Pull A.A. / General Purpose** | **Small Signal Transistor** |
| VCBO = **-40 V** fT = **100 - 200 MHz**  VCE0 = **-25 V** VBE(sat) = **-1.2 V**  VEBO = **-6 V** PD = **1 W**  IC = **-1.5 A** TSTG = **-65 ~ 150 °C**  hFE = **85 min. / 160 typ. / 300 max.** | VCBO = **30 V** fT = **Min. 100 MHz**  VCE0 = **20 V** VBE(sat) = **1.2 V**  VEBO = **5 V** PC = **1 W**  IC = **700 mA** TSTG = **-65 ~ 150 °C**  hFE = **120 min. / 400 max.** | VCBO = **-30 V** fT = **Min. 100 MHz**  VCE0 = **-20 V** VBE(sat) = **-1.2 V**  VEBO = **-5 V** PC = **1 W**  IC = **-700 mA** TSTG = **-65 ~ 150 °C**  hFE = **120 min. / 400 max.** | V(BR)CBO = **-40 V** fT = **Min. 150 MHz**  V(BR)CE0 = **-25 V** VBE(sat) = **-1.2 V**  V(BR)EBO = **-5 V** PC = **625 mW**  IC = **-500 mA** TJ = **-55 ~ 150 °C**  hFE = **64 min. / 300 max.** |
| **S9013 NPN** | **S9014 NPN** | **S9015 PNP** | **S9018 NPN** |
|  |  |  |  |
| **Small Signal Transistor** | **Audio Output Stage / Conv. / Inv. Circuits** | **Switching / General Purpose Transistor** | **High Current Gain Bandwidth Transistor** |
| V(BR)CBO = **40 V** fT = **Min. 150 MHz**  V(BR)CE0 = **25 V** VBE(sat) = **1.2 V**  V(BR)EBO = **5 V** PC = **625 mW**  IC = **500 mA** TJ = **-55 ~ 150 °C**  hFE = **64 min. / 400 max.** | VCBO = **50 V** fT = **Min. 150 MHz**  VCE0 = **45 V** VBE(sat) = **0.85 V**  VEBO = **5 V** PC = **400 mW**  IC = **500 mA** TJ = **-55 ~ 135 °C**  hFE = **60 min. / 1000 max.** | VCBO = -**50 V** fT = **Min. 60 MHz**  VCE0 = -**50 V** NF= **10 dB max.**  VEBO = **-5 V** PC = **625 mW**  IC = **-150 mA** TJ = **-55 ~ 150 °C**  hFE = **100 min. / 1000 max.** | VCBO = **25 V** fT = **Typ. 800 MHz**  VCE0 = **18 V** VBE(sat) = **1.42 V**  VEBO = **4 V** PC = **400 mW**  IC = **50 mA** TJ = **-55 ~ 150 °C**  hFE = **28 min. / 270 max.** |
| **TIP31A NPN** | **B1565 PNP** |  |  |
|  |  |  |  |
| **M. Power Linear Switching Applic.** | **Silicon Power Amplifier Transistor** |  |  |
| VCBO = **60 V** fT = **Min. 3.0 MHz**  VCE0 = **60 V** IB = **1.0 A**  VEBO = **5 V** PC(Tc = 25°C)= **40 mW**  IC = **3 A** TSTG = **-65 ~ 150 °C**  hFE = **10 min. / 50 max.** | VCBO = **-80 V** fT = **Typ. 15 MHz**  VCE0 = -**60 V** VBE(sat) = -**1.5 V**  VEBO = **-7 V** PC(Tc = 25°C) = **25 mW**  IC = **-3 A** TSTG = **-55 ~ 150 °C**  hFE = **100 min. / 320 max.** |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |