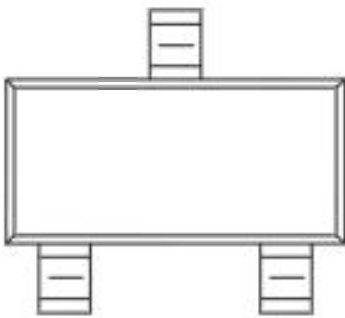


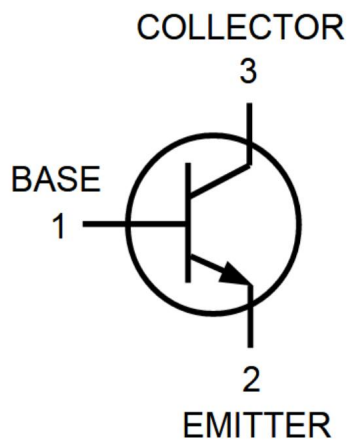
2SC2412

TRANSISTOR (NPN)

MARKING :

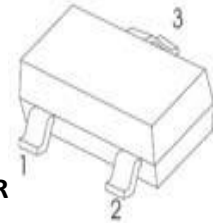


Equivalent Circuit :



SOT-23

- 1.BASE
- 2.EMITTER
- 3.COLLECTOR



FEATURES:

- LOW Cob, Cob=2.0 PF(TYP)

MAXIMUM RATINGS (Ta=25°C unless otherwise noted)

| Parameter | Symbol | Value | Unit |
|---|--------|----------|------|
| Collector-Base Voltage | VCBO | 60 | V |
| Collector-Emitter Voltage | VCEO | 50 | V |
| Emitter-Base Voltage | VEBO | 7 | V |
| Collector Current -Continuous | IC | 150 | mA |
| Collector Current -Pulsed | ICM | 200 | mA |
| Collector Power Dissipation | PC | 200 | mW |
| Thermal Resistance From Junction To Ambient | ROJA | 625 | °C/W |
| Junction Temperature | Tj | 150 | °C |
| Storage Temperature | Tstg | -55~+150 | °C |

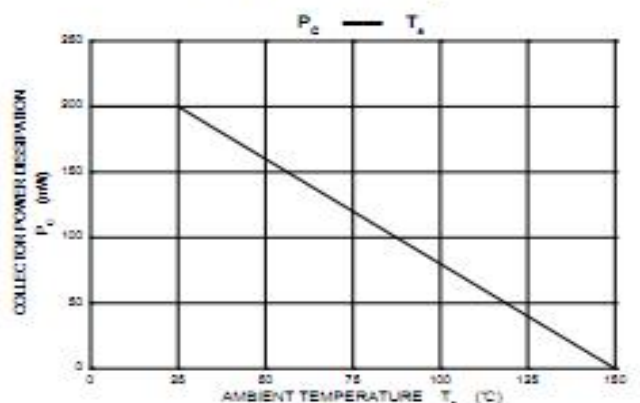
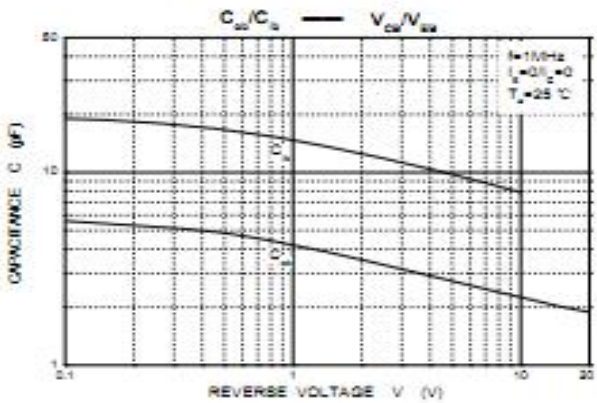
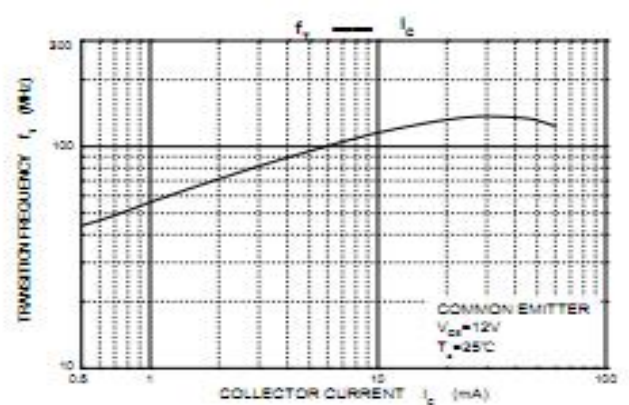
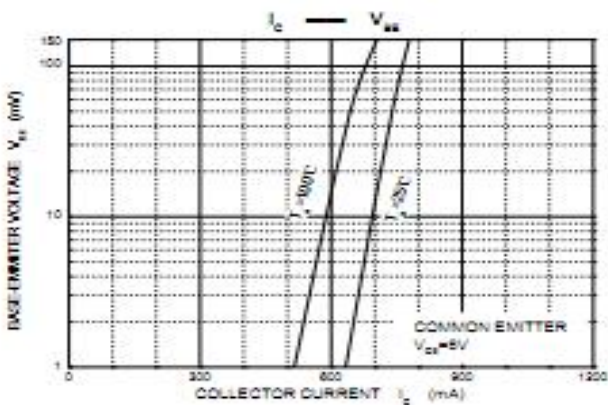
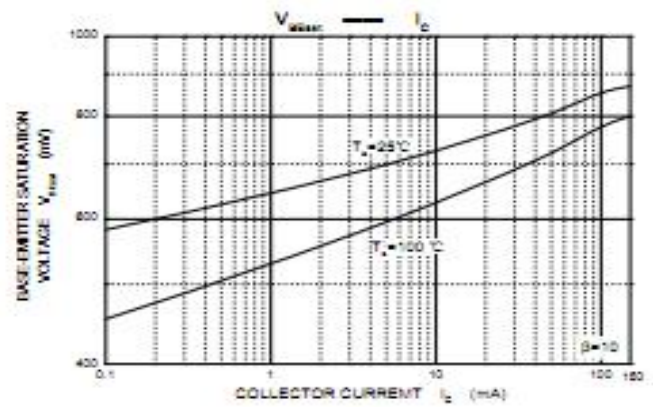
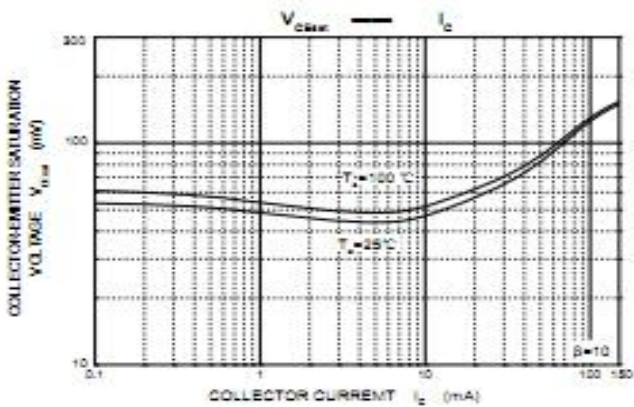
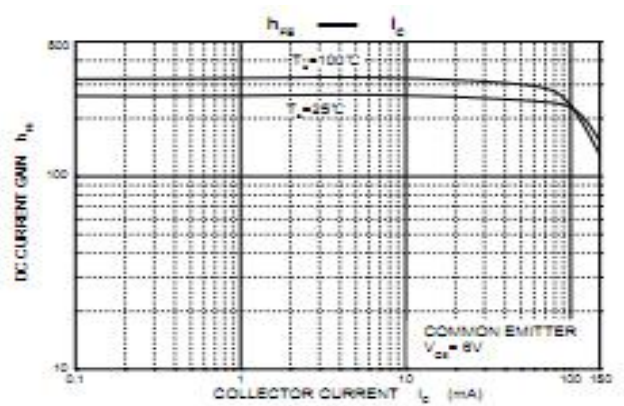
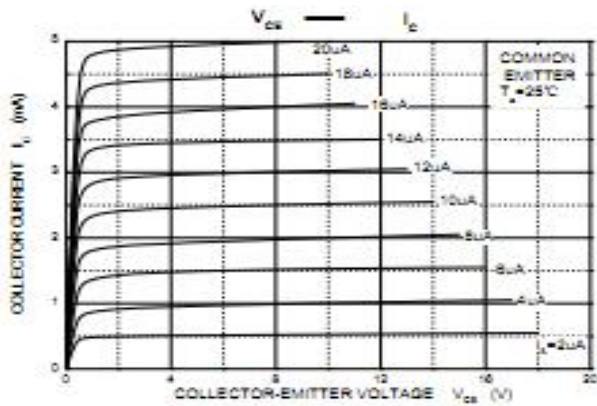
ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

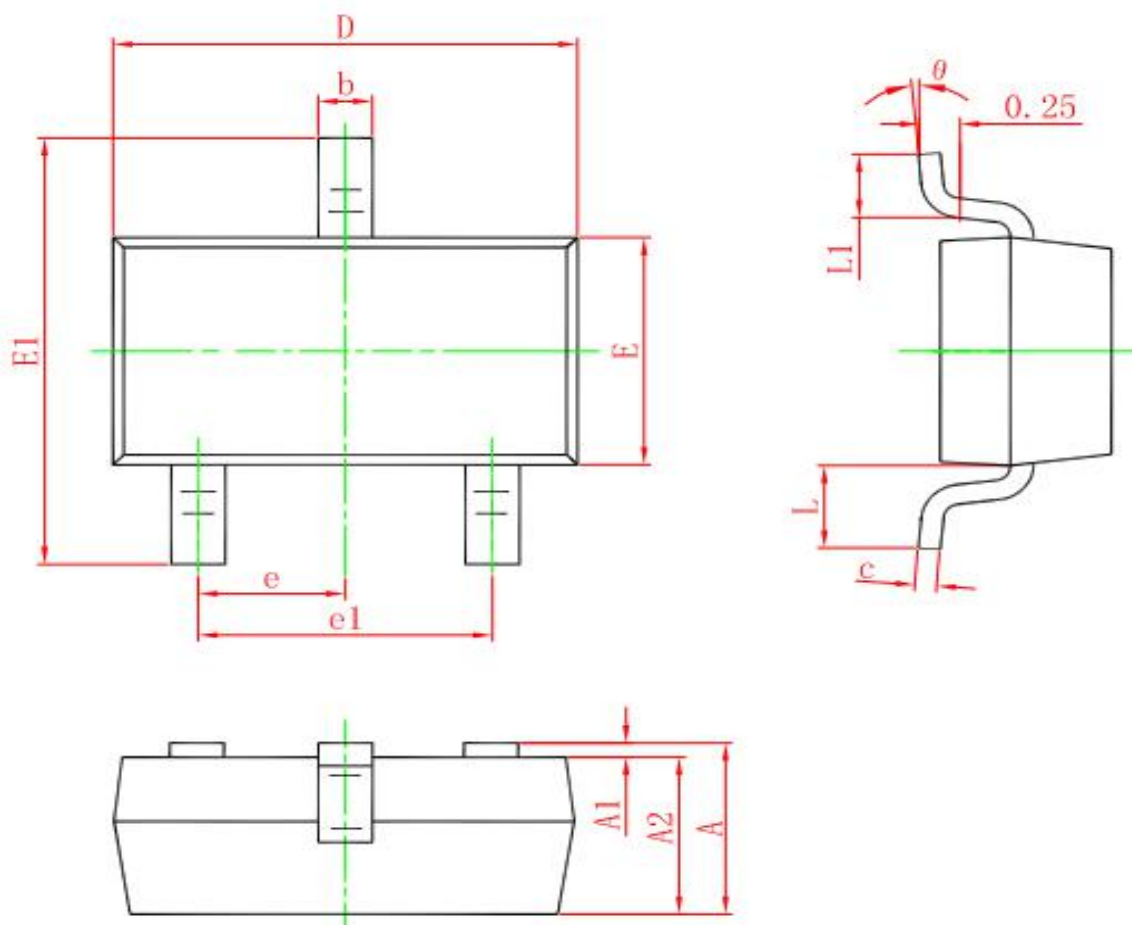
| Parameter | Symbol | Test Condition | Min | Typ | Max | Unit |
|--------------------------------------|----------|-------------------------------|-----|-----|-----|------|
| Collector-base breakdown voltage | V(BR)CBO | IC= 50μA, IE=0 | 60 | | | V |
| Collector-emitter breakdown voltage | V(BR)CEO | IC= 1mA, IB=0 | 50 | | | V |
| Emitter-base breakdown voltage | V(BR)EBO | IE=50μA, IC=0 | 7 | | | V |
| Collector cut-off current | ICBO | VCB= 60 V , IE=0 | | | 0.1 | μA |
| Emitter cut-off current | IEBO | VEB= 7V , IC=0 | | | 0.1 | μA |
| DC current gain | hFE | VCE= 6V, IC= 1mA | 120 | | 560 | |
| | hFE | VCE= 6V, IC= 10mA | 100 | | | |
| Collector-emitter saturation voltage | VCE(sat) | IC= 50mA, IB= 5mA | | | 0.4 | V |
| Base-emitter saturation voltage | VBE(sat) | IC= 50 mA, IB= 5mA | | | 1 | V |
| Transition frequency | fT | VCE= 12V, IC= 2mA f=100MHz | | 160 | | MHz |
| Collector output capacitance | Cob | VCB=12V, IE=0, f=1MHz | | | 3.5 | PF |

CLASSIFICATION OF hFE

| Rank | Q | R | S |
|---------|---------|---------|---------|
| Range | 120-270 | 180-390 | 270-560 |
| Marking | BQ | BR | BS |

TYPICAL ELECTRICAL AND THERMAL CHARACTERISTICS



SOT-23 PACKAGE OUTLINE DIMENSIONS


| Symbol | Dimensions In Millimeters | | Dimensions In Inches | |
|----------|---------------------------|-------|----------------------|-------|
| | Min. | Max. | Min. | Max. |
| A | 0.900 | 1.150 | 0.035 | 0.045 |
| A1 | 0.000 | 0.100 | 0.000 | 0.004 |
| A2 | 0.900 | 1.050 | 0.035 | 0.041 |
| b | 0.300 | 0.500 | 0.012 | 0.020 |
| c | 0.080 | 0.150 | 0.003 | 0.006 |
| D | 2.800 | 3.000 | 0.110 | 0.118 |
| E | 1.200 | 1.400 | 0.047 | 0.055 |
| E1 | 2.250 | 2.550 | 0.089 | 0.100 |
| e | 0.950 TYP. | | 0.037 TYP. | |
| e1 | 1.800 | 2.000 | 0.071 | 0.079 |
| L | 0.550 REF. | | 0.022 REF. | |
| L1 | 0.300 | 0.500 | 0.012 | 0.020 |
| θ | 0° | 8° | 0° | 8° |