

Epoxy meets UL-94 V-0 flammability rating
Halogen free available upon request by adding suffix "HF"
Moisture Sensitivity Level 1

: SOT-89
Molding compound meets UL 94 V-0 flammability rating,
RoHS-compliant, halogen-free
Tin plated leads, solderable per
J-STD-002 and JESD22-B102
Marking: 1G6

(Ta=25 - unless otherwise noted)

| | | | | |
|---|-----------|------|-----------------------|-------------|
| Minimum Collector-Emitter Voltage | V_{CEO} | V | $I_C=1mA, I_B=0$ | 160 |
| Minimum Collector-Base Voltage | V_{CBO} | V | $I_C=100\mu A, I_E=0$ | 180 |
| Minimum Emitter-Base Voltage | V_{EBO} | V | $I_E=10\mu A, I_C=0$ | 6 |
| Collector Current | I_C | mA | | 600 |
| Collector Power Dissipation | P_C | mW | | 500 |
| Thermal Resistance From Junction To Ambient | R_{JA} | - /W | | 250 |
| Operation Junction Temperature | T_j | - | | -55 to +150 |
| Storage Temperature | T_{stg} | - | | -55 to +150 |



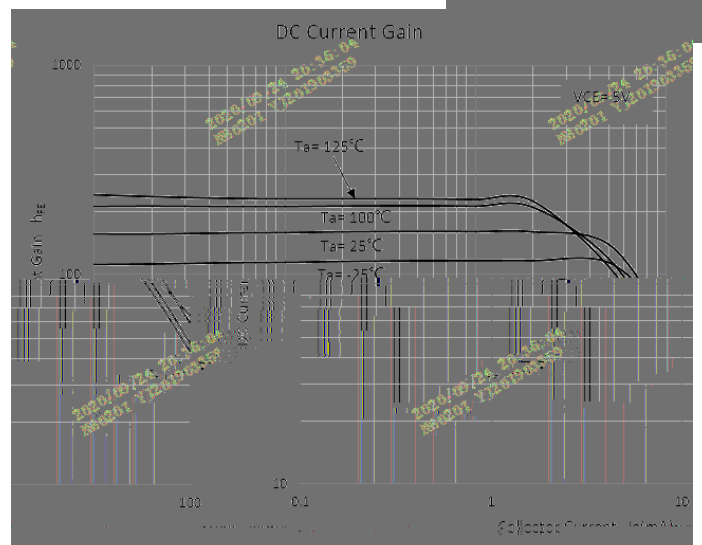
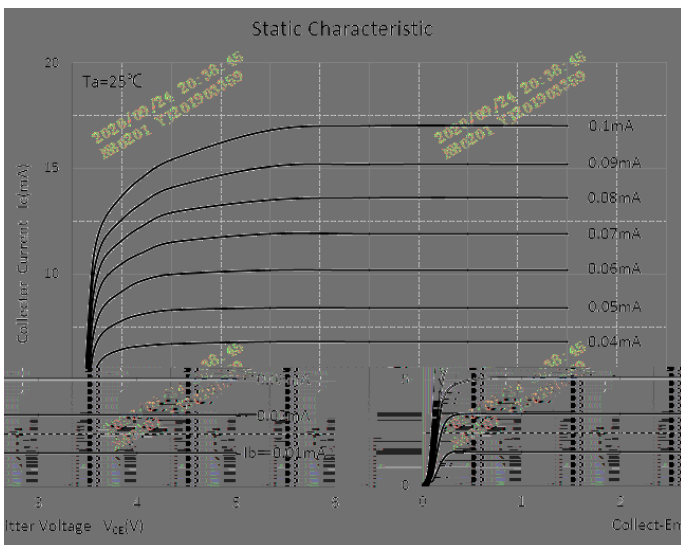
(Ta=25 unless otherwise noted)

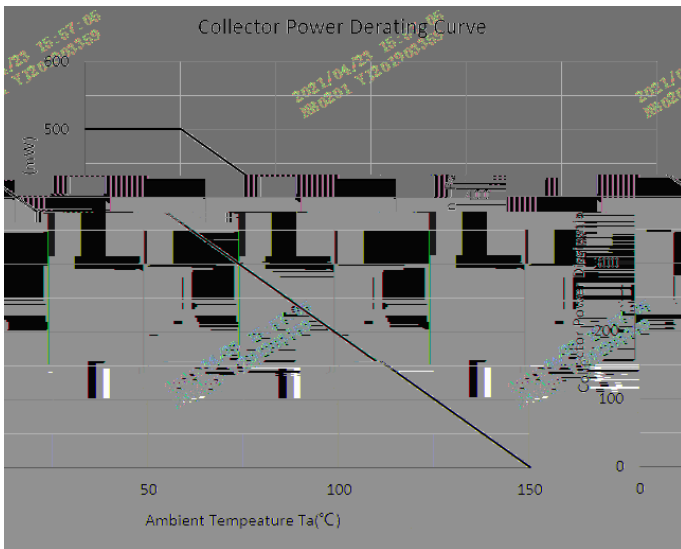
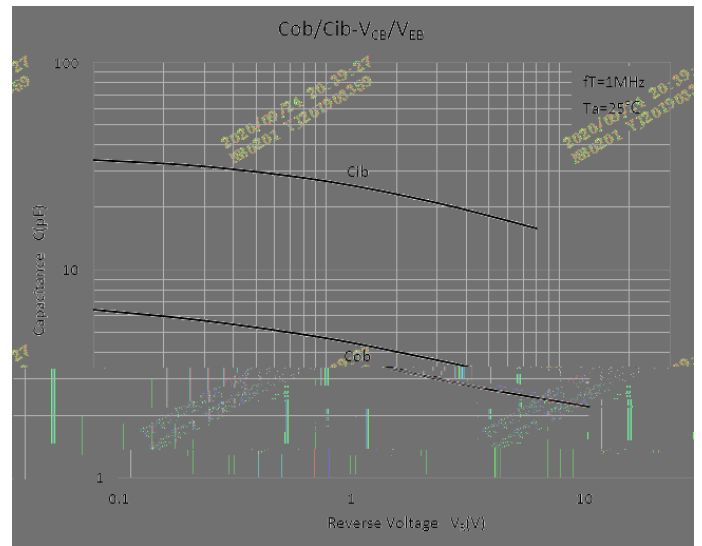
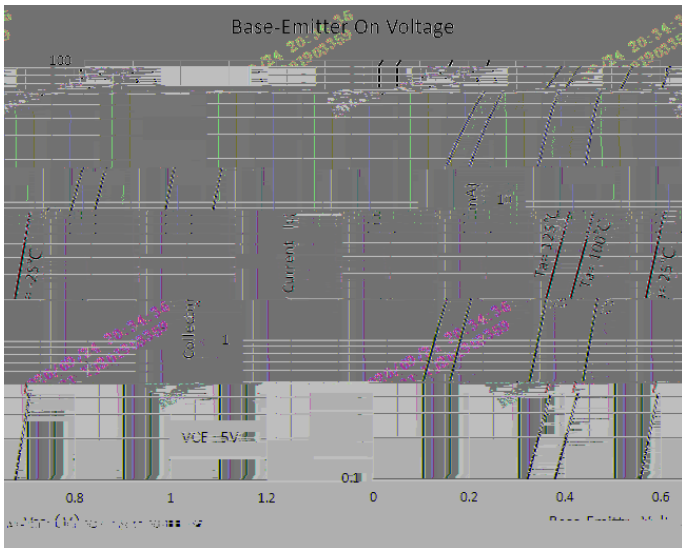
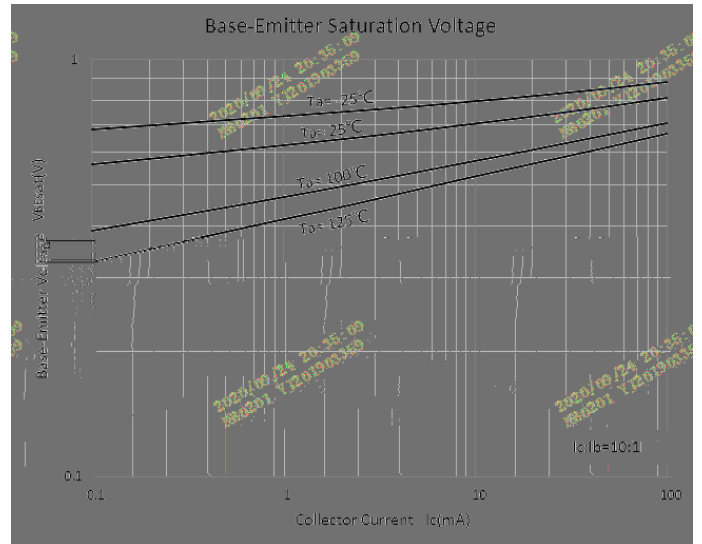
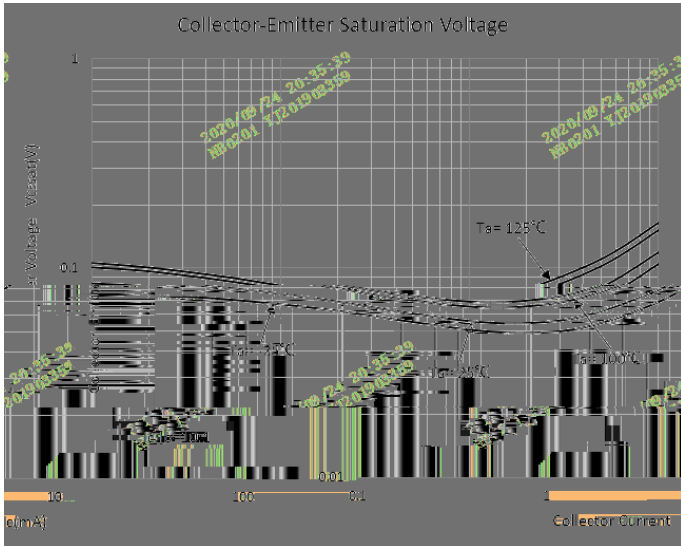
| | | | | | | |
|--------------------------------------|---------------|-----|--|-----|--|------|
| Collector-Emitter Voltage | V_{CEO} | V | $I_C=1mA, I_B=0$ | 160 | | |
| Collector-Base Voltage | V_{CBO} | V | $I_C=100\mu A, I_E=0$ | 180 | | |
| Emitter-Base Voltage | V_{EBO} | V | $I_E=10\mu A, I_C=0$ | 6 | | |
| Collector-Base cut-off current | I_{CBO} | nA | $V_{CB}=120V$ | | | 50 |
| Emitter-Base cut-off current | I_{EBO} | nA | $V_{EB}=5V$ | | | 50 |
| DC Current Gain | h_{FE1} | | $I_C=1mA, V_{CE}=5V$ | 80 | | |
| | h_{FE2} | | $I_C=10mA, V_{CE}=5V$ | 100 | | 300 |
| | h_{FE3} | | $I_C=150mA, V_{CE}=5V$ | 30 | | |
| Collector-Emitter Saturation Voltage | $V_{CE(sat)}$ | V | $I_C=10mA, I_B=1mA$ | | | 0.15 |
| | | | $I_C=50mA, I_B=5mA$ | | | 0.2 |
| Base-Emitter Saturation Voltage | $V_{BE(sat)}$ | V | $I_C=10mA, I_B=1mA$ | | | 1 |
| | | | $I_C=50mA, I_B=5mA$ | | | 1 |
| Transition Frequency | f_T | MHz | $I_C=10mA, V_{CE}=10V, f=100MHz$ | 100 | | |
| Output Capacitance | C_{obo} | pF | $V_{CB}=10V, f=1MHz, I_E=0$ | | | 6 |
| Noise Figure | NF | dB | $V_{CE}=5V, I_C=0.2mA, R_s=10\Omega, f=10Hz \text{ to } 15.7KHz$ | | | 8 |

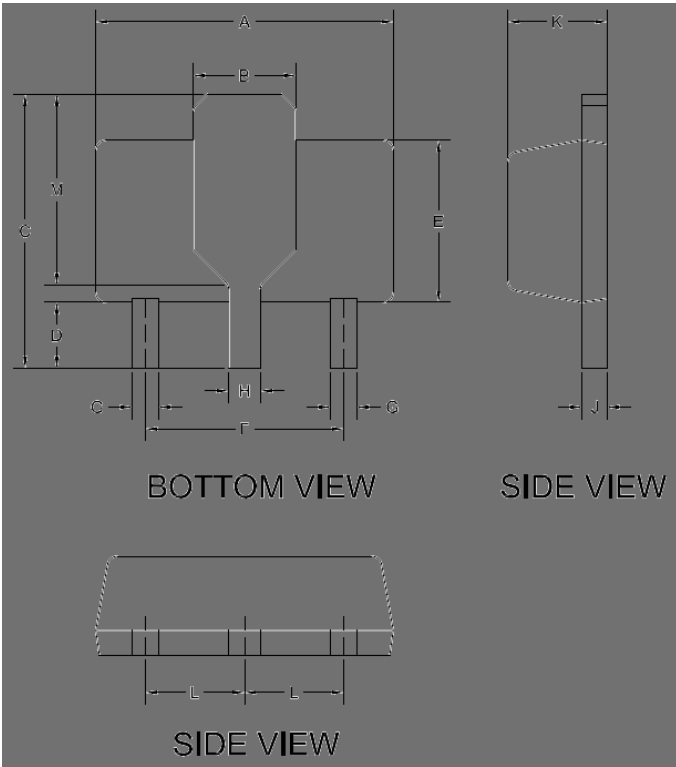
(Example)

| | | | | | | |
|---------|----|-------------------|------|------|-------|---------|
| CXT5551 | F2 | Approximate 0.055 | 1000 | 8000 | 32000 | 7" reel |
|---------|----|-------------------|------|------|-------|---------|

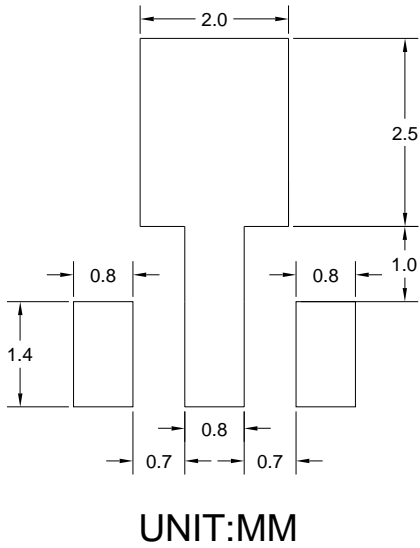
(Typical)







| DIM | INCHES | | MM | |
|-----|------------|-------|-------------|--------|
| | MIN. | MAX. | MIN. | MAX. |
| A | 0.173 | 0.181 | 4.400 | 4.600 |
| B | 0.061 TYP. | | 1.550 TYP. | |
| C | 0.155 | 0.167 | 3.940 | 4.250 |
| D | 0.031 | 0.047 | 0.800 | 1.200 |
| E | 0.024 | 0.102 | 2.400 | 2.600 |
| F | 0.118 TYP. | | 3.00 TYP. | |
| G | 0.014 | 0.019 | 0.360 | 0.480 |
| H | 0.560 | 0.617 | 14.176 | 15.664 |
| J | 0.440 | 0.479 | 11.176 | 12.168 |
| K | 1.600 | 0.055 | 40.640 | 1.418 |
| L | 0.052 TYP. | | 1.320 TYP. | |
| M | 2.750 TYP. | | 69.900 TYP. | |





The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website [http:// www.21yangjie.com](http://www.21yangjie.com) , or consult your nearest Yangjie's sales office for further assistance.