



2SA1479/2SC3789

High-Definition CRT Display Video Output Applications

Applications

- High-definition CRT display.
- Color TV chroma output, high breakdown voltage drivers.

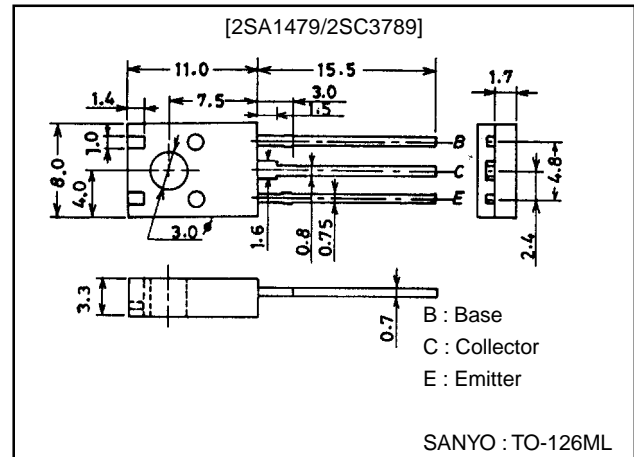
Features

- High breakdown voltage ($V_{CEO} \geq 300V$).
- Excellent high frequency characteristic
: $C_{re} = 1.8pF$ (typ).
- Adoption of MBIT process.
- No insulator required for mounting, which contributes to reducing the cost and the number of manufacturing processes.
- Plastic-covered heat sink facilitating high-density mounting.
- Directly interchangeable with TO-126 because the package is designed based on the conventional package dimensions.

Package Dimensions

unit:mm

2042A



() : 2SA1479

Specifications

Absolute Maximum Ratings at $T_a = 25^\circ C$

| Parameter | Symbol | Conditions | Ratings | Unit |
|------------------------------|-----------|--------------------|-------------|------------|
| Collector-to-Base Voltage | V_{CBO} | | (-)300 | V |
| Collector-to-Emitter Voltage | V_{CEO} | | (-)300 | V |
| Emitter-to-Base Voltage | V_{EBO} | | (-)5 | V |
| Collector Current | I_C | | (-)100 | mA |
| Peak Collector Current | I_{CP} | | (-)200 | mA |
| Collector Dissipation | P_C | | 1.5 | W |
| | | $T_c = 25^\circ C$ | 7 | W |
| Junction Temperature | T_j | | 150 | $^\circ C$ |
| Storage Temperature | T_{stg} | | -55 to +150 | $^\circ C$ |

Electrical Characteristics at $T_a = 25^\circ C$

| Parameter | Symbol | Conditions | Ratings | | | Unit |
|-----------------------------------------|---------------|----------------------------------|---------|-------|--------|---------|
| | | | min | typ | max | |
| Collector Cutoff Current | I_{CBO} | $V_{CB} = (-)200V, I_E = 0$ | | | (-)0.1 | μA |
| Emitter Cutoff Current | I_{EBO} | $V_{EB} = (-)4V, I_C = 0$ | | | (-)0.1 | μA |
| DC Current Gain | h_{FE} | $V_{CE} = (-)10V, I_C = (-)10mA$ | 40* | | 320* | |
| Gain-Bandwidth Product | f_T | $V_{CE} = (-)30V, I_C = (-)10mA$ | | 70 | | MHz |
| Collector-to-Emitter Saturation Voltage | $V_{CE(sat)}$ | $I_C = (-)20mA, I_B = (-)2mA$ | | | (-)0.6 | V |
| Base-to-Emitter Saturation Voltage | $V_{BE(sat)}$ | $I_C = (-)20mA, I_B = (-)2mA$ | | | (-)1.0 | V |
| Collector-to-Base Breakdown Voltage | $V_{(BR)CBO}$ | $I_C = (-)10\mu A, I_E = 0$ | (-)300 | | | V |
| Collector-to-Emitter Breakdown Voltage | $V_{(BR)CEO}$ | $I_C = (-)1mA, R_{BE} = \infty$ | (-)300 | | | V |
| Emitter-to-Base Breakdown Voltage | $V_{(BR)EBO}$ | $I_E = (-)10\mu A, I_C = 0$ | (-)5 | | | V |
| Output Capacitance | C_{ob} | $V_{CB} = (-)30V, f = 1MHz$ | | 2.6 | | pF |
| | | | | (3.1) | | pF |
| Reverse Transfer Capacitance | C_{re} | $V_{CB} = (-)30V, f = 1MHz$ | | 1.8 | | pF |
| | | | | (2.3) | | pF |

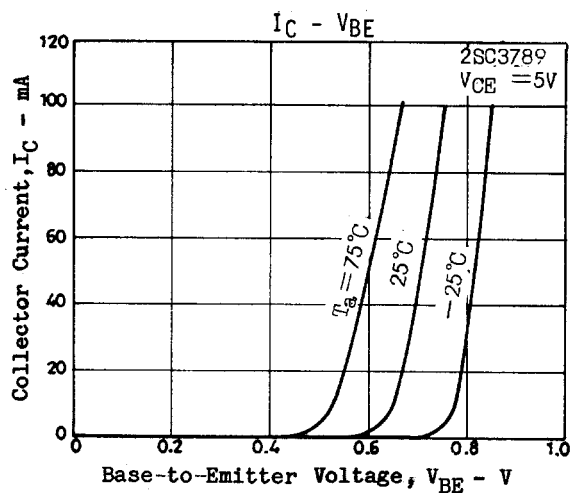
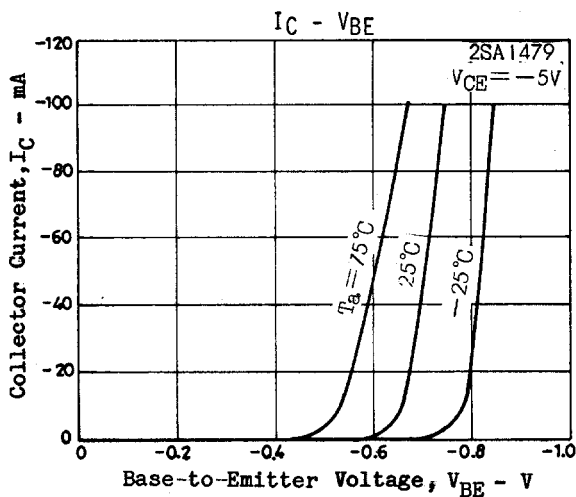
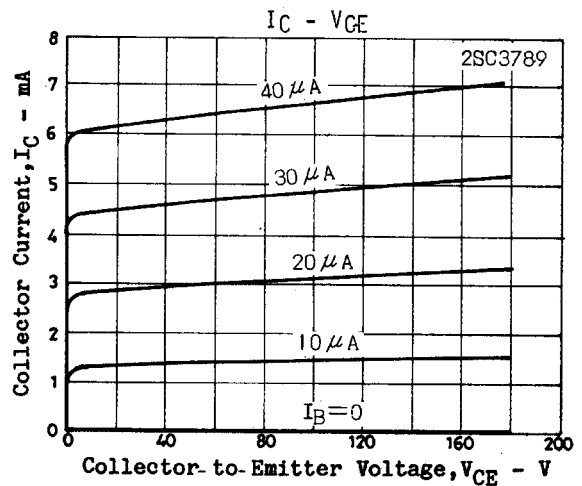
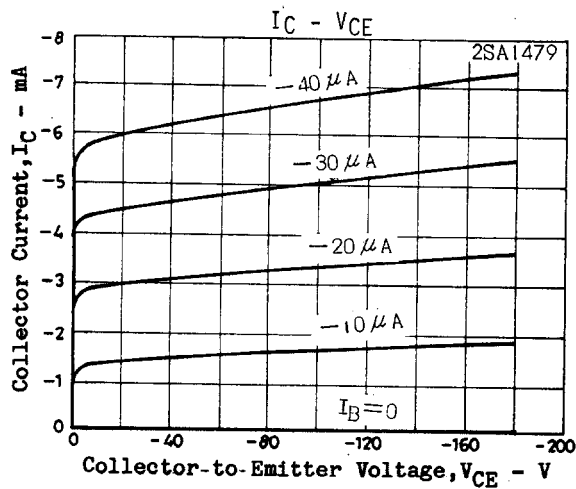
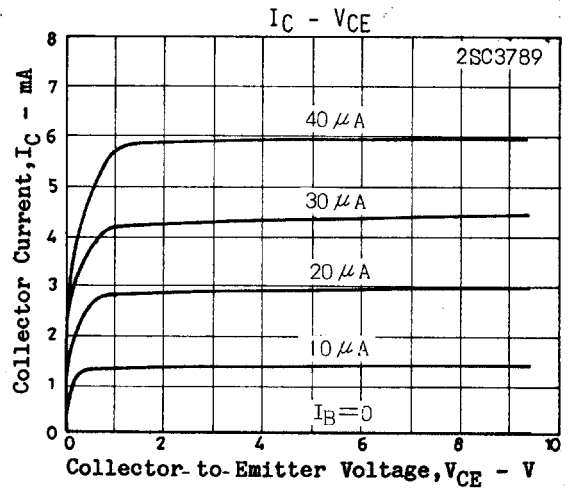
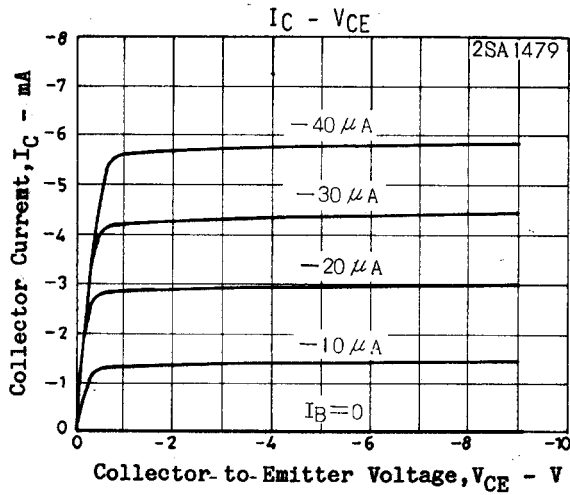
SANYO Electric Co., Ltd. Semiconductor Business Headquarters

TOKYO OFFICE Tokyo Bldg., 1-10, 1 Chome, Ueno, Taito-ku, TOKYO, 110-8534 JAPAN

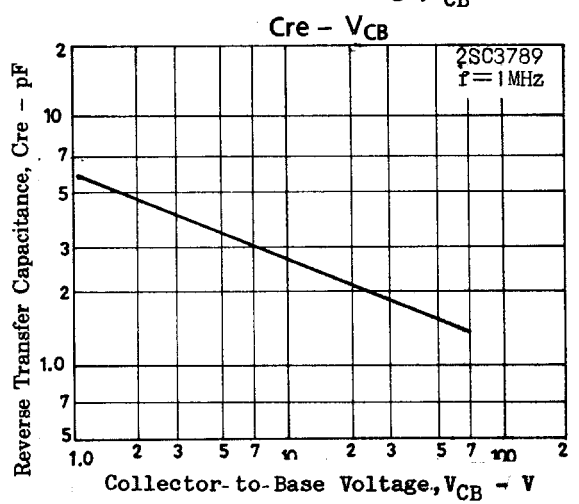
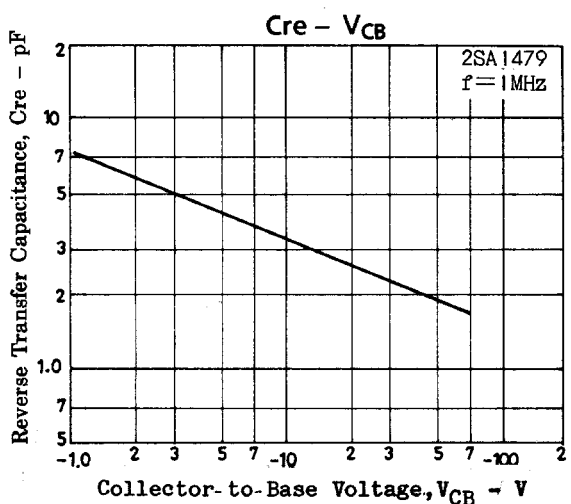
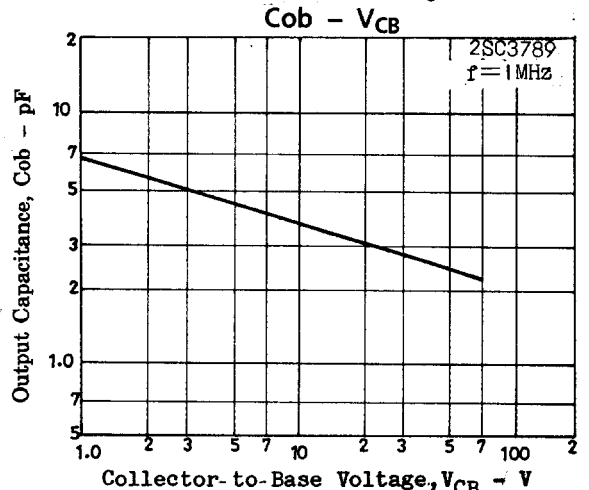
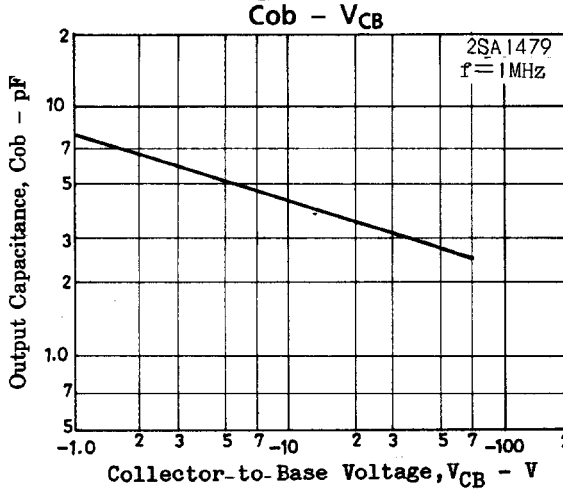
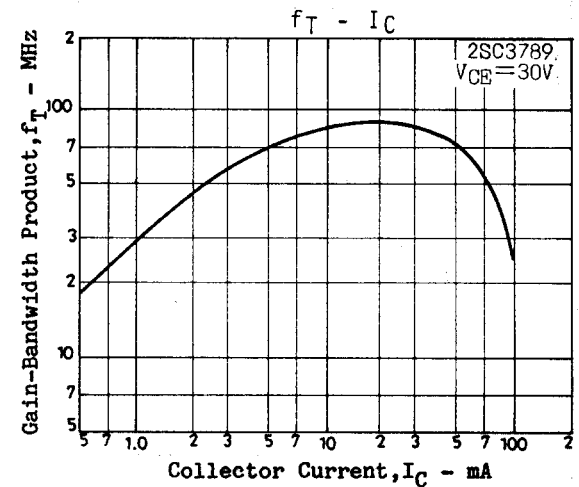
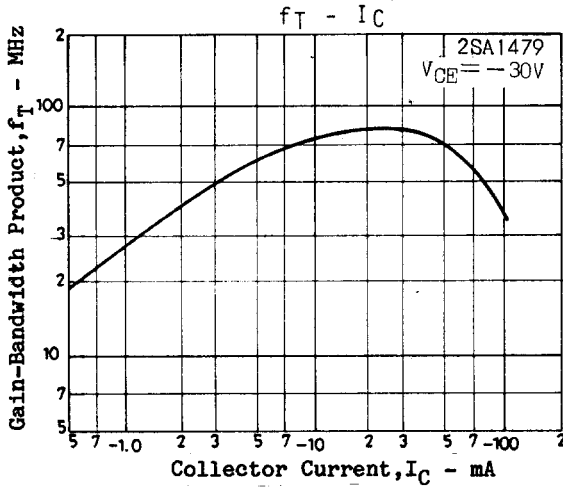
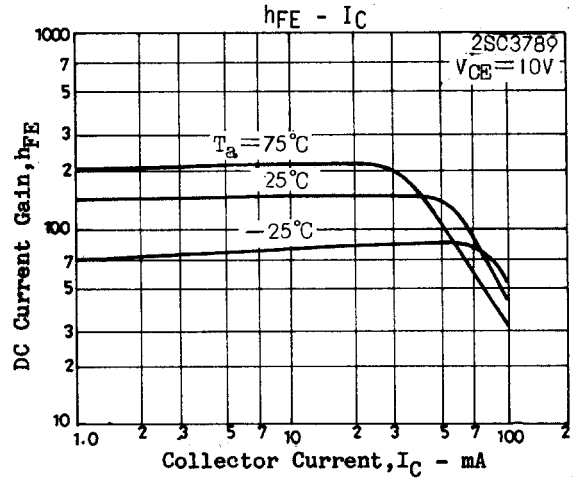
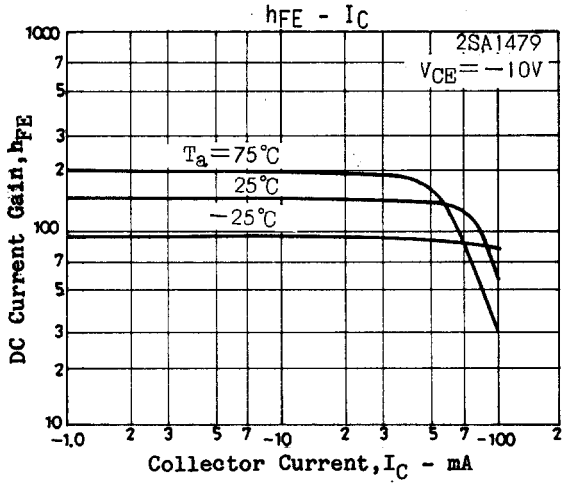
2SA1479/2SC3789

* : The 2SA1479/2SC3789 are classified by 10mA h_{FE} as follows :

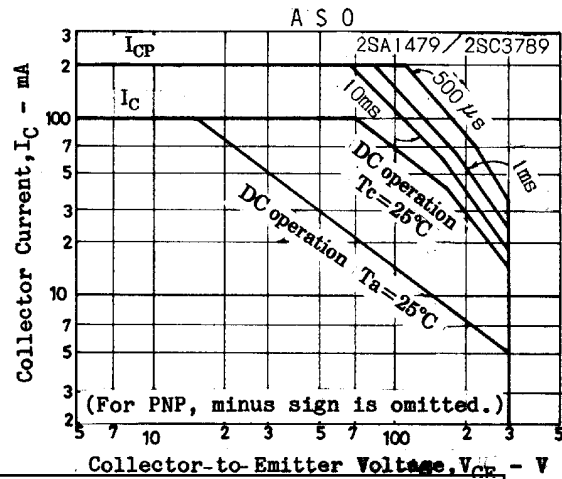
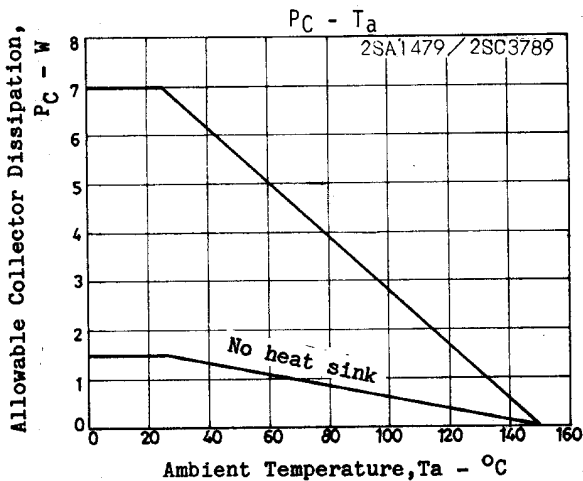
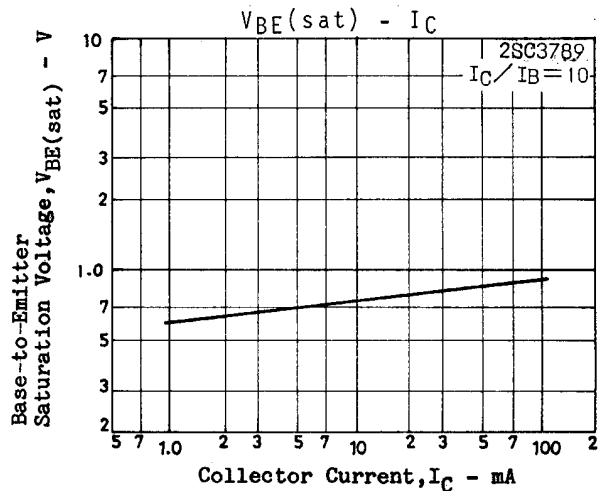
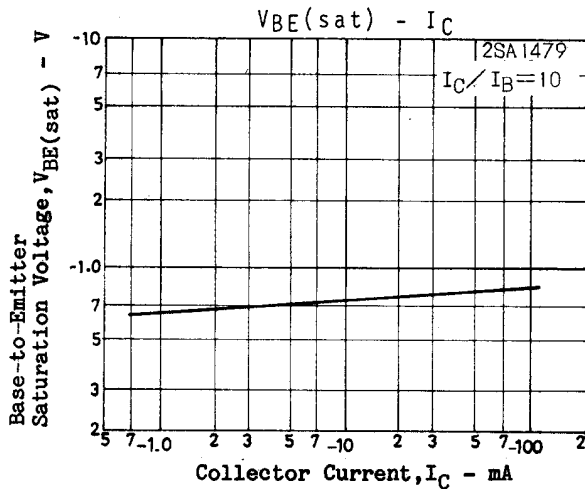
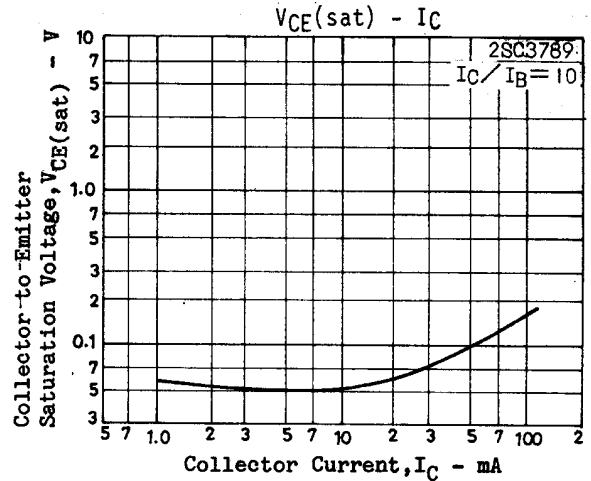
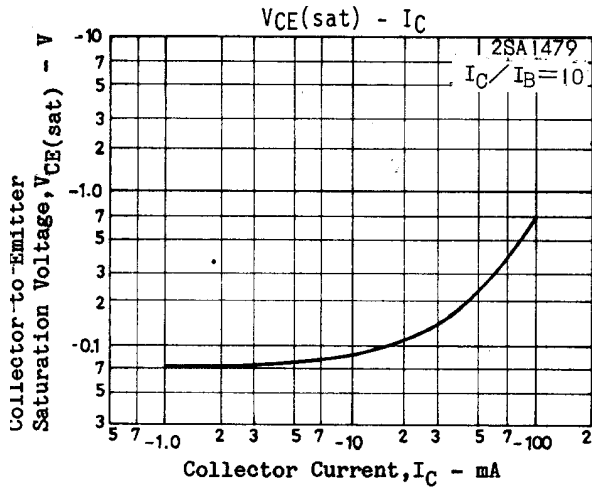
| | | | | | | | | | | | |
|----|---|----|----|---|-----|-----|---|-----|-----|---|-----|
| 40 | C | 80 | 60 | D | 120 | 100 | E | 200 | 160 | F | 320 |
|----|---|----|----|---|-----|-----|---|-----|-----|---|-----|



2SA1479/2SC3789



2SA1479/2SC3789



■ No products described or contained herein are intended for use in surgical implants, life-support systems, aerospace equipment, nuclear power control systems, vehicles, disaster/crime-prevention equipment and the like, the failure of which may directly or indirectly cause injury, death or property loss.

■ Anyone purchasing any products described or contained herein for an above-mentioned use shall:

- ① Accept full responsibility and indemnify and defend SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors and all their officers and employees, jointly and severally, against any and all claims and litigation and all damages, cost and expenses associated with such use;
- ② Not impose any responsibility for any fault or negligence which may be cited in any such claim or litigation on SANYO ELECTRIC CO., LTD., its affiliates, subsidiaries and distributors or any of their officers and employees jointly or severally.

■ Information (including circuit diagrams and circuit parameters) herein is for example only; it is not guaranteed for volume production. SANYO believes information herein is accurate and reliable, but no guarantees are made or implied regarding its use or any infringements of intellectual property rights or other rights of third parties.

This catalog provides information as of July, 1998. Specifications and information herein are subject to change without notice.