



2SA1875 / 2SC4976

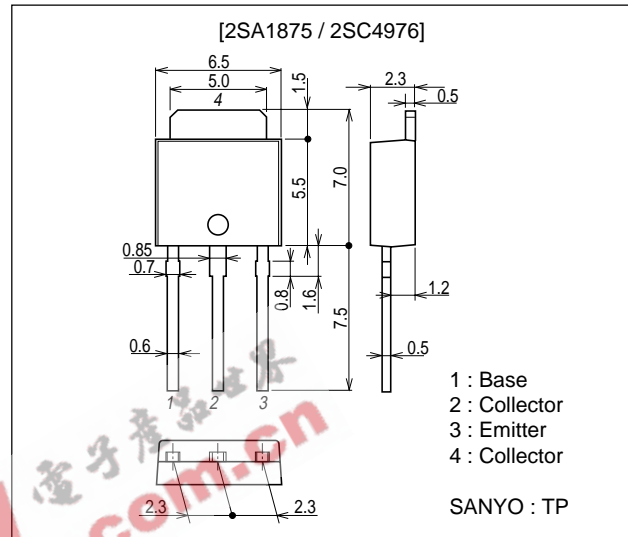
High-Definition CRT Display Video Output Applications

Features

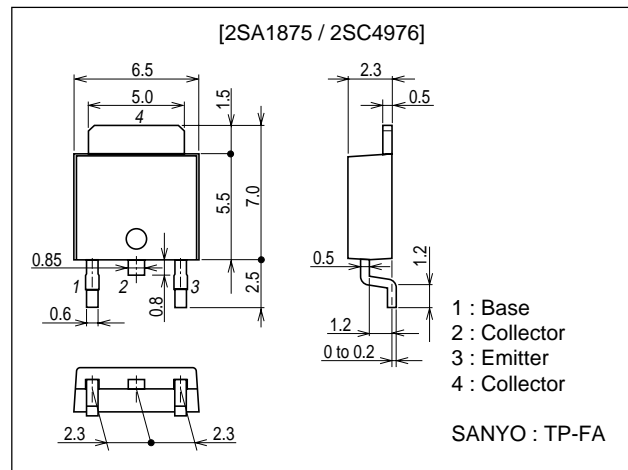
- High f_T : $f_T=400\text{MHz}(\text{typ})$.
- High breakdown voltage : $V_{CE0} \geq 200\text{V}(\text{min})$.
- Large current capacitance.
- Small reverse transfer capacitance and excellent high-frequency characteristic :
 $C_{re}=3.4\text{pF}(\text{NPN}), 4.2\text{pF}(\text{PNP})$.
- Adoption of FBET process.

Package Dimensions

unit : mm
2045B



unit : mm
2044B



■ Any and all SANYO products described or contained herein do not have specifications that can handle applications that require extremely high levels of reliability, such as life-support systems, aircraft's control systems, or other applications whose failure can be reasonably expected to result in serious physical and/or material damage. Consult with your SANYO representative nearest you before using any SANYO products described or contained herein in such applications.

■ SANYO assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all SANYO products described or contained herein.

Specifications

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Absolute Maximum Ratings at Ta=25°C

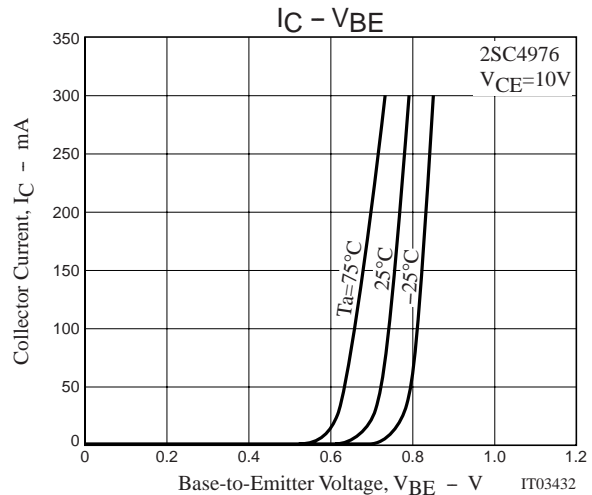
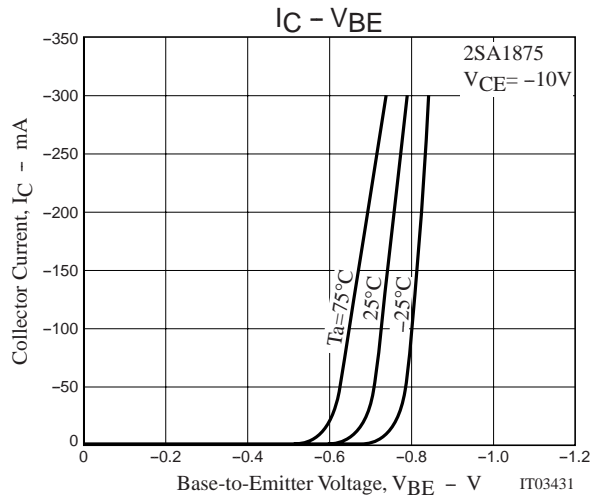
Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V _{CB0}		(-)200	V
Collector-to-Emitter Voltage	V _{CEO}		(-)200	V
Emitter-to-Base Voltage	V _{EBO}		(-)3	V
Collector Current	I _C		(-)300	mA
Collector Current (Pulse)	I _{CP}		(-)600	mA
Base Current	I _B		(-)30	mA
Collector Dissipation	P _C		0.8	W
		T _C =25°C	12	W
Junction Temperature	T _J		150	°C
Storage Temperature	T _{stg}		-55 to +150	°C

Electrical Characteristics at Ta=25°C

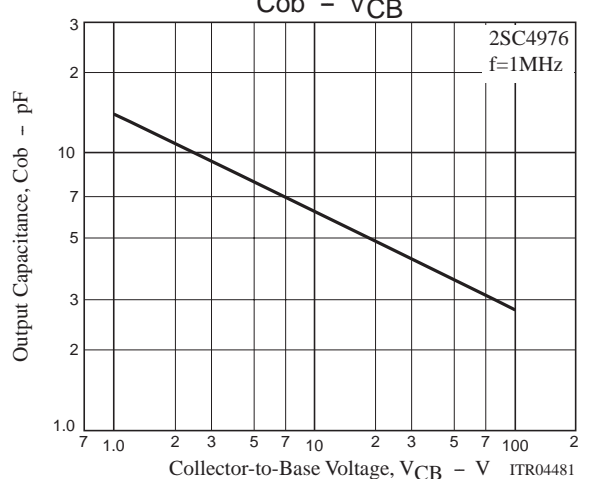
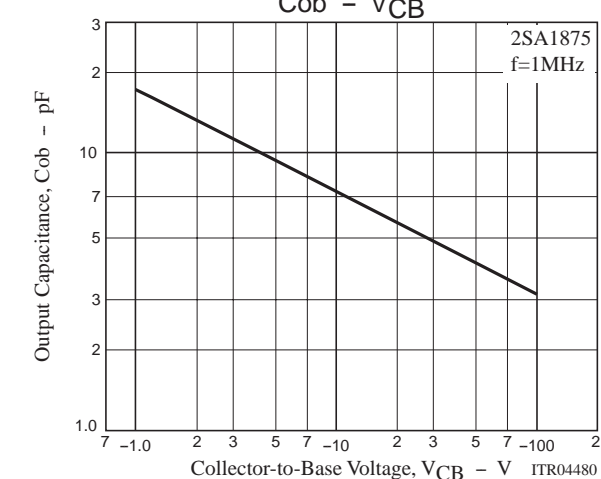
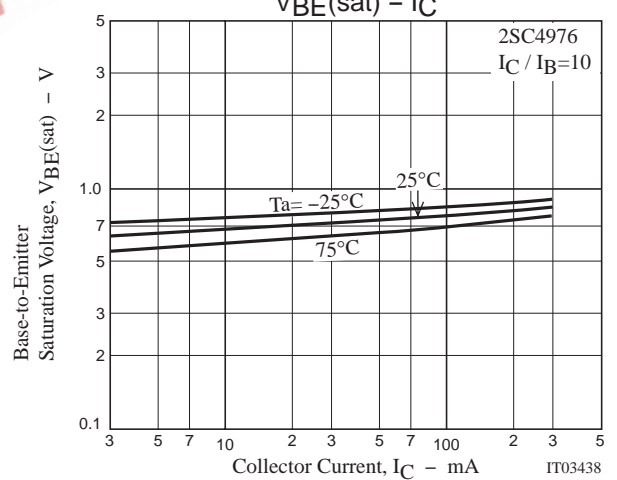
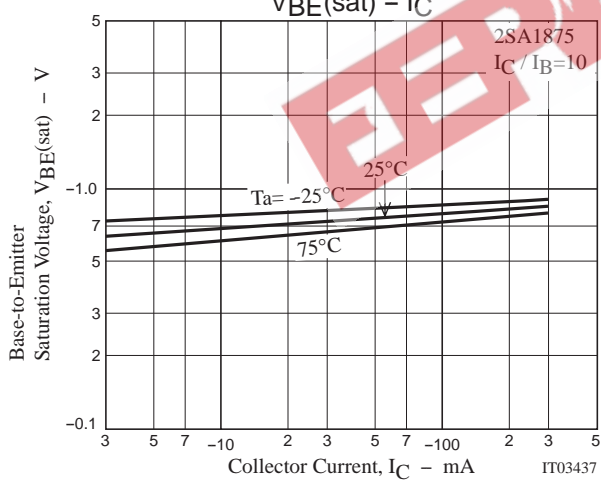
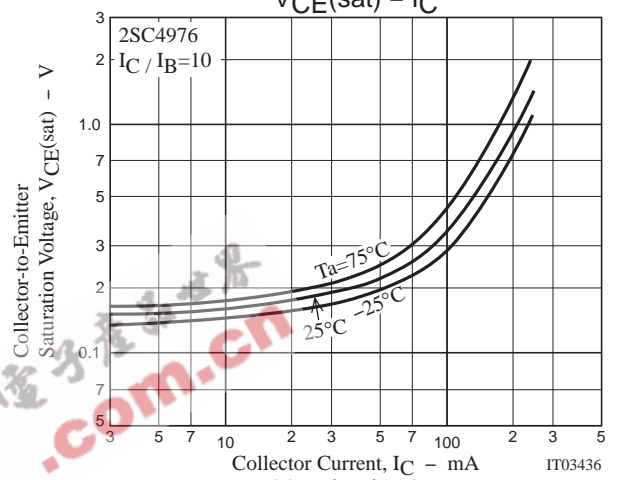
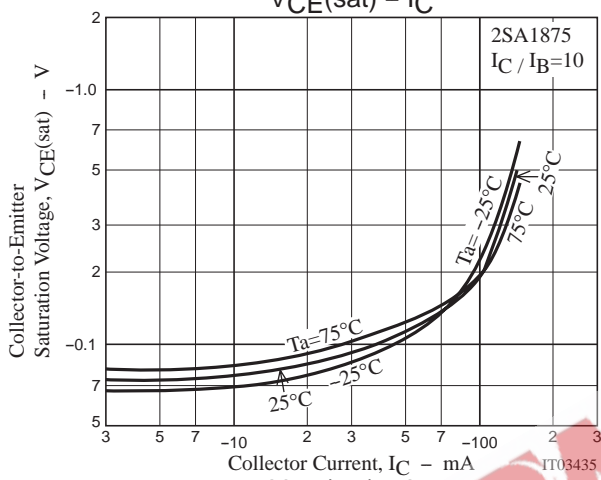
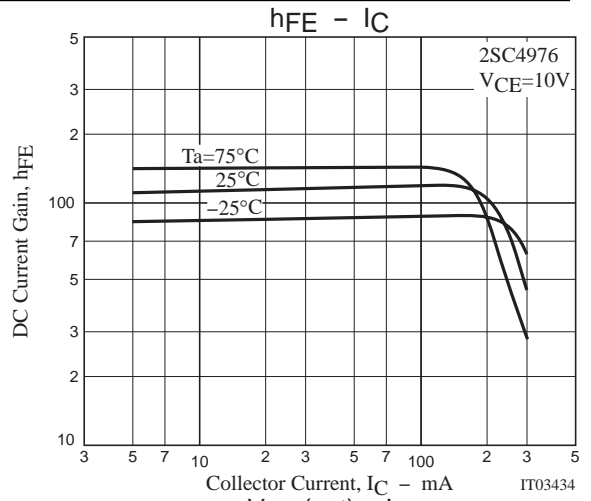
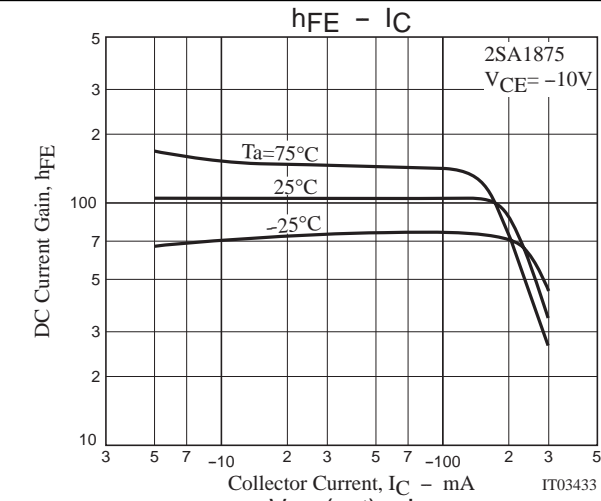
Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	
Collector Cutoff Current	I _{CBO}	V _{CB} =(-)150V, I _E =0			(-)0.1	μA
Emitter Cutoff Current	I _{EBO}	V _{EB} =(-)2V, I _C =0			(-)1.0	μA
DC Current Gain	h _{FE1}	V _{CE} =(-)10V, I _C =(-)50mA	60*		320*	
	h _{FE2}	V _{CE} =(-)10V, I _C =(-)250mA	20			
Gain-Bandwidth Product	f _T	V _{CE} =(-)10V, I _C =(-)100mA		400		MHz
Output Capacitance	C _{ob}	V _{CB} =(-)30V, f=1MHz		(5.0)4.2		pF
Reverse Transfer Capacitance	C _{re}	V _{CB} =(-)30V, f=1MHz		(4.2)3.4		pF
Collector-to-Emitter Saturation Voltage	V _{CE(sat)}	I _C =(-)50mA, I _B =(-)5mA			(-)1.0	V
Base-to-Emitter Saturation Voltage	V _{BE(sat)}	I _C =(-)50mA, I _B =(-)5mA			(-)1.0	V
Collector-to-Base Breakdown Voltage	V(BR)CBO	I _C =(-)10μA, I _E =0	(-)200			V
Collector-to-Emitter Breakdown Voltage	V(BR)CEO	I _C =(-)1mA, R _{BE} =∞	(-)200			V
Emitter-to-Base Breakdown Voltage	V(BR)EBO	I _E =(-)100μA, I _C =0	(-)3			V

* : The 2SA1875 / 2SC4976 are classified by 50mA h_{FE} as follows

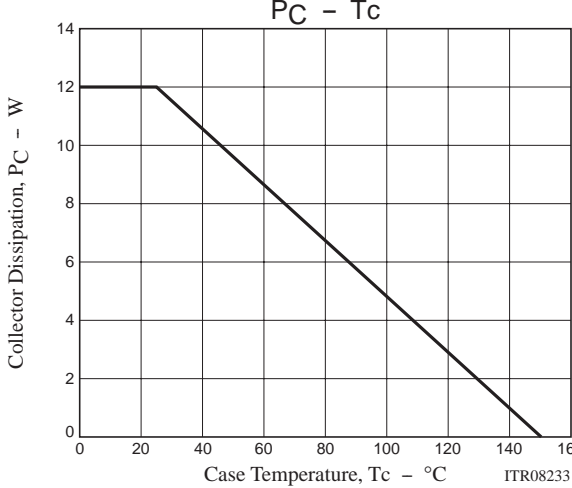
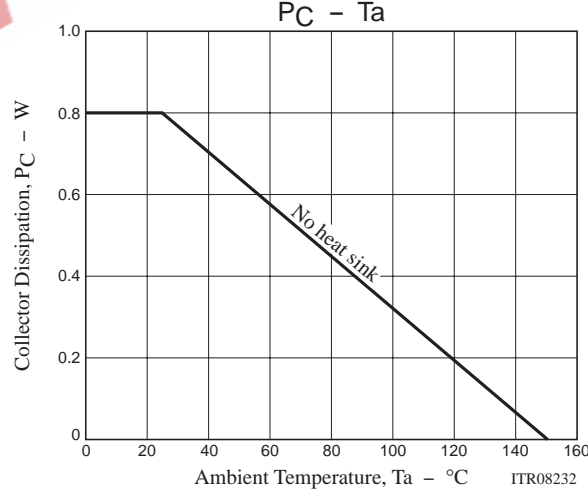
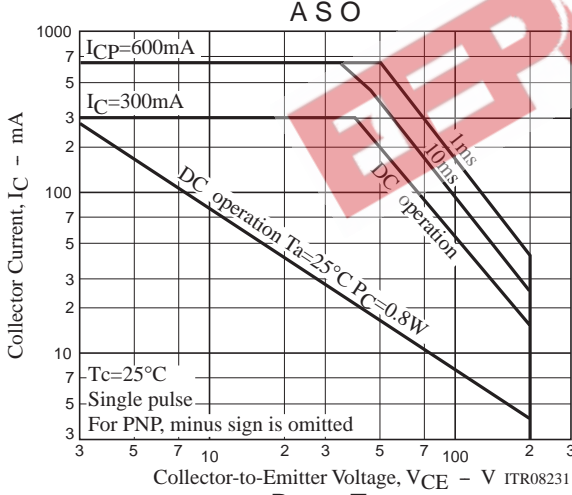
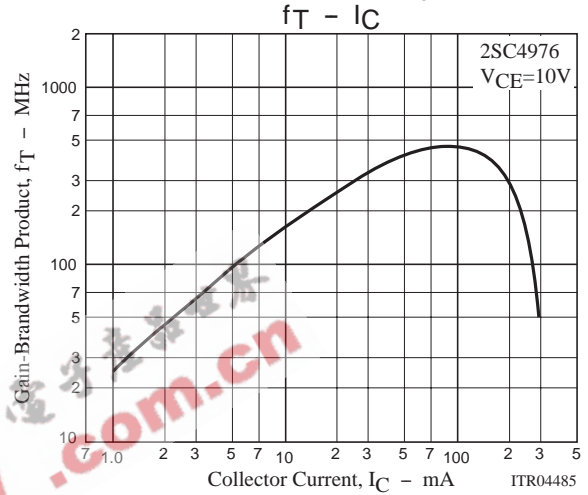
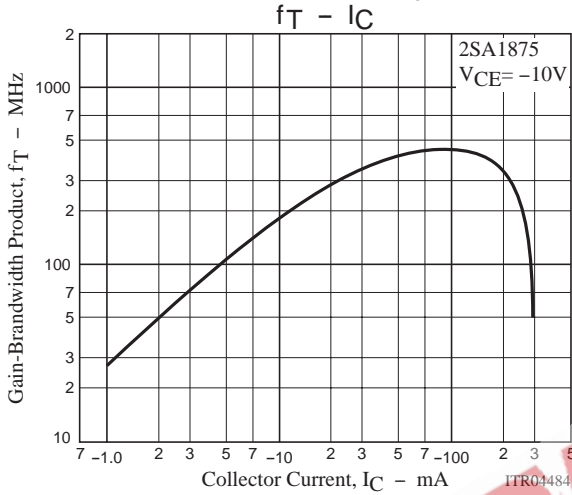
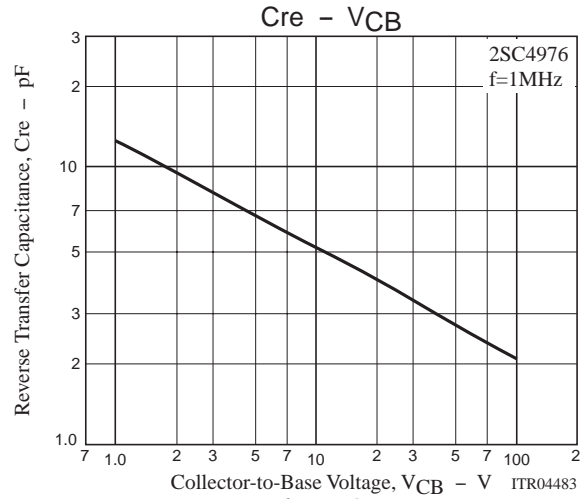
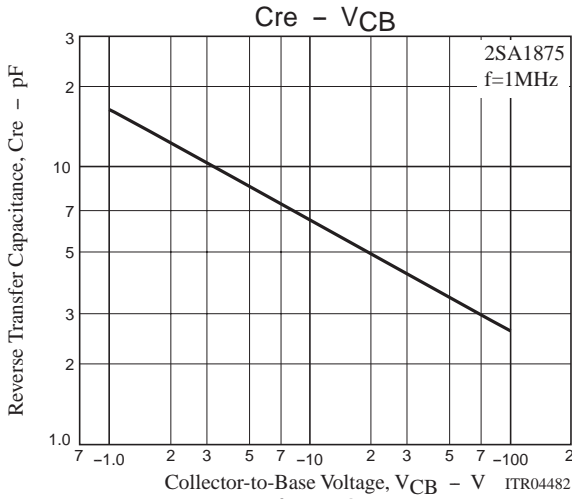
Rank	D	E	F
h _{FE}	60 to 120	100 to 200	160 to 320



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