

2SA1787/2SC4650

High-Definition CRT Display Video Output Applications

Features

- · High breakdown voltage : V_{CEO}≥200V.
- · Small reverse transfer capacitance and excellent high frequency characteristic:

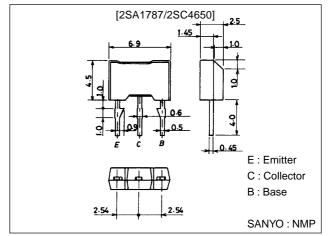
C_{re}=1.2pF (NPN), 1.7pF (PNP).

· Adoption of FBET processes.

Package Dimensions

unit:mm

2064



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Specifications

Absolute Maximum Ratings at Ta = 25°C

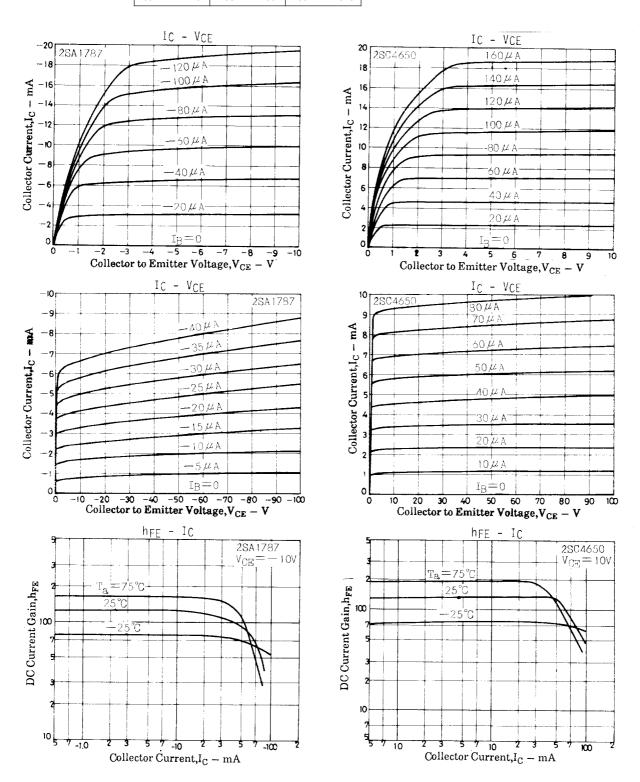
Parameter	Symbol	Conditions	Ratings	Unit
Collector-to-Base Voltage	V _{CBO}		(-)200	V
Collector-to-Emitter Voltage	V _{CEO}		(-)200	V
Emitter-to-Base Voltage	V _{EBO}		(-)5	V
Collector Current	IC		(-)100	mA
Colletor Current (Pulse)	I _{CP}		(-)200	mA
Collector Dissipation	PC		1.0	W
Junction Temperature	Tj		150	°C
Storage Temperature	Tstg		-55 to +150	°C

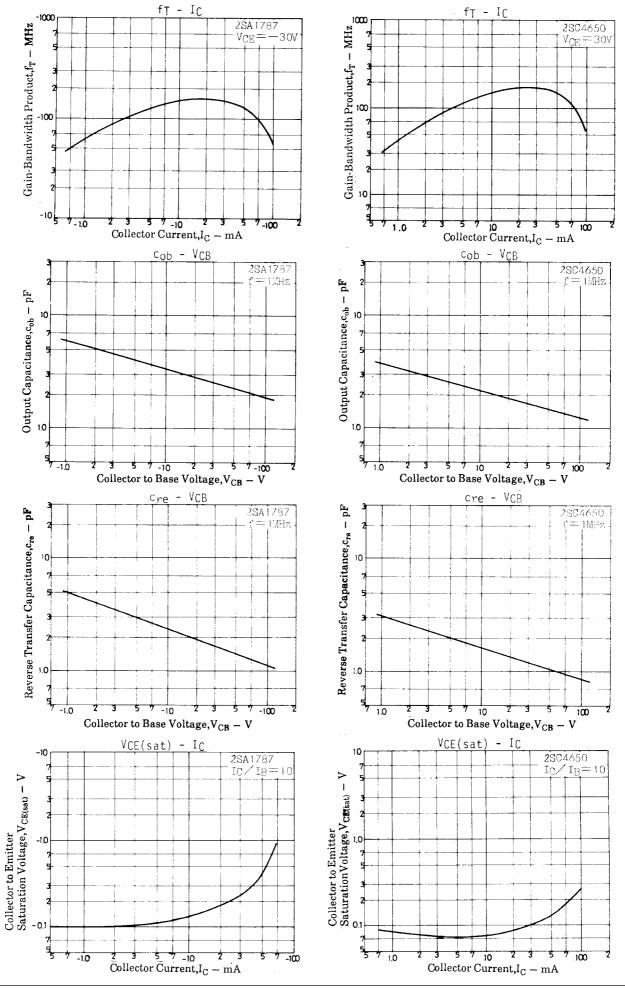
Electrical Characteristics at Ta = 25°C

Parameter	Cumphal	Conditions		Ratings		
	Symbol		min	typ	max	Unit
Collector Cutoff Current	I _{CBO}	V _{CB} =(-)150V, I _E =0			(-)0.1	μA
Emitter Cutoff Current	I _{EBO}	V _{EB} =(-)4V, I _C =0			(–)0.1	μΑ
DC Current Gain	hFE	V _{CE} =(-)10V, I _C =(-)10mA	60		320	
Gain-Bandwidth Product	fT	V _{CE} =(-)30V, I _C =(-)10mA		150		MHz
Output Capacitance	C _{ob}	V _{CB} =(-)30V, f=1MHz		(2.6)		pF
				1.7		pF
Reverse Transfer Capacitance	C _{re}	V _{CB} =(-)30V, f=1MHz		(1.7)		pF
				1.2		pF
Collector-to-Emitter Saturation Voltage	V _{CE(sat)}	I _C =(-)20mA, I _B =(-)2mA			(–)0.6	V
Base-to-Emitter Saturation Voltage	V _{BF(sat)}	I _C =(-)20mA, I _B =(-)2mA			(-)1.0	V

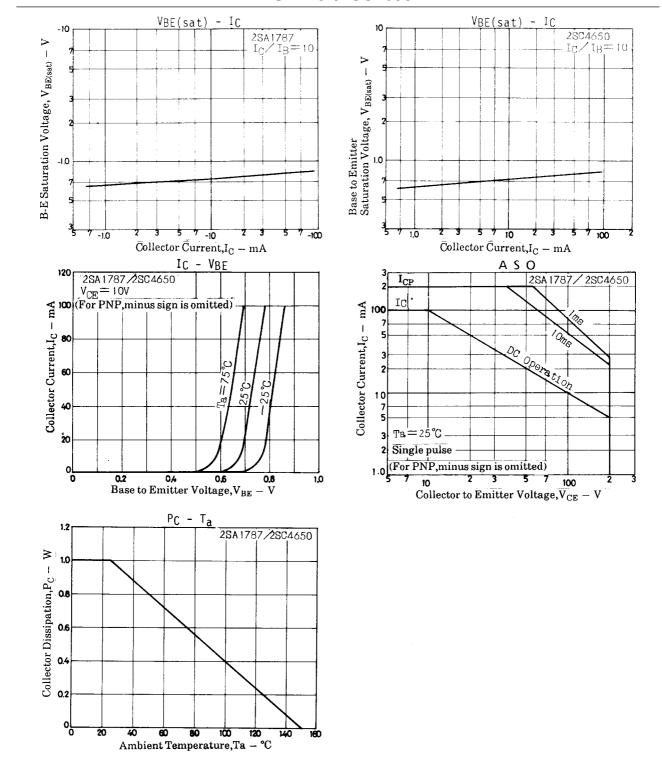
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Parameter	Symbol	Conditions	Ratings			Unit
			min	typ	max	Uill
Collector-to-Base Breakdown Voltage	V _(BR) CBO	I _C =(-)10μΑ, I _E =0	(-)200			V
Collector-to-Emitter Breakdown Voltage	V _(BR) CEO	I _C =(–)1mA, R _{BE} =∞	(-)200			V
Emitter-to-Base Breakdown Voltage	V(BR)EBO	I _E =(-)10μA, I _C =0	(–)5			V





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