

SILICON PNP TRIPLE DIFFUSED TYPE (PCT PROCESS)

TBF870 TBF872

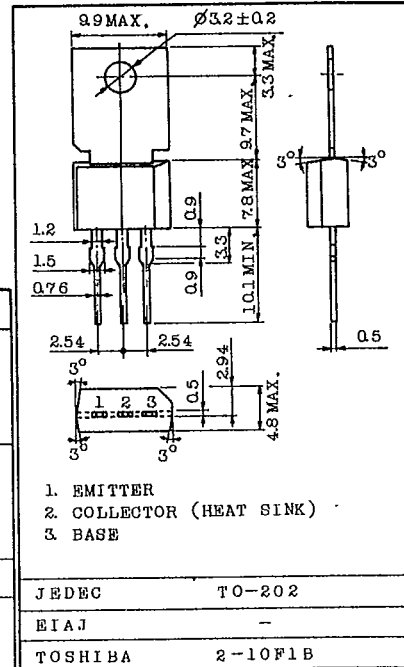
HIGH VOLTAGE SWITCHING AND AMPLIFIER APPLICATIONS.
COLOR TV CHROMA OUTPUT APPLICATIONS.

. NPN Complements are TBF869 and TBF871.

MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC		SYMBOL	RATING	UNIT
Collector-Base Voltage	TBF870	V _{CB0}	-250	V
	TBF872		-300	
Collector-Emitter Voltage	TBF870	V _{CE0}	-250	V
	TBF872		-300	
Emitter-Base Voltage		V _{EB0}	-5	V
Collector Current	DC	I _C	-50	mA
	Peak	I _{CP}	-100	
Total Power Dissipation		P _{tot}	1.6	W
			5.0 (T _c =25°C)	
Base Current		I _B	-20	mA
Junction Temperature		T _j	150	°C
Storage Temperature Range		T _{stg}	-65 ~ 150	°C
Solder Temperature, 1.5mm from Case for 10 Seconds		-	350	°C

Unit in mm



Weight : 1.4g

THERMAL CHARACTERISTICS

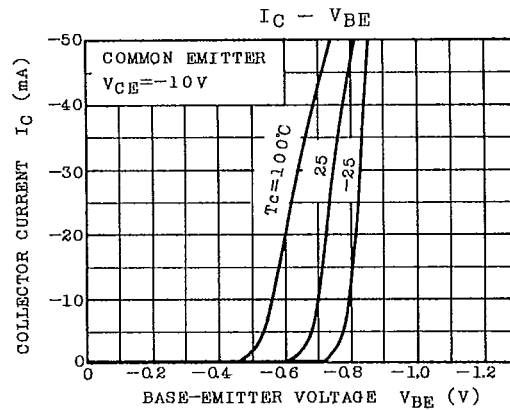
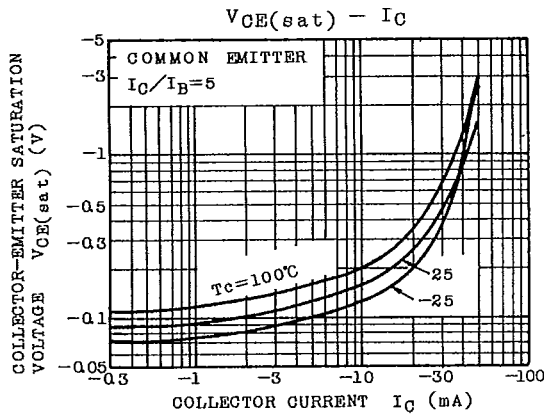
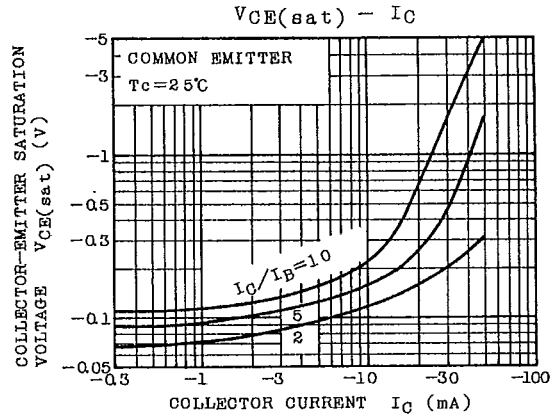
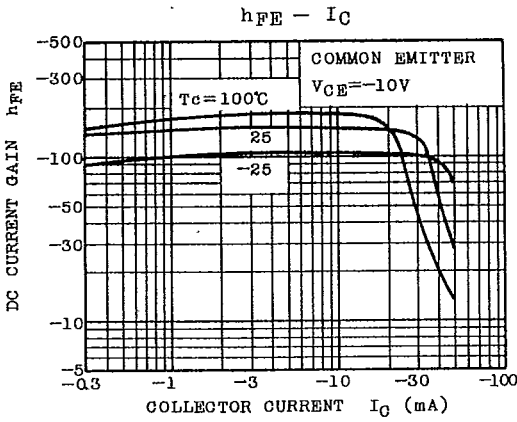
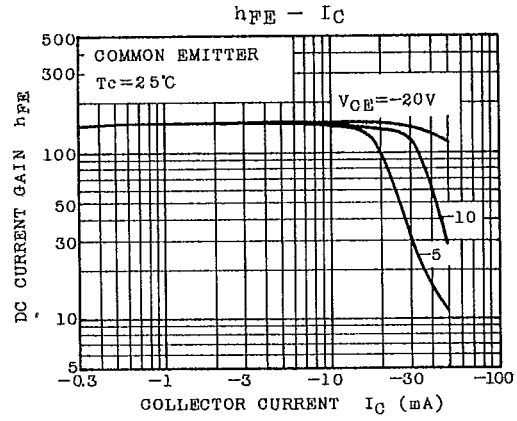
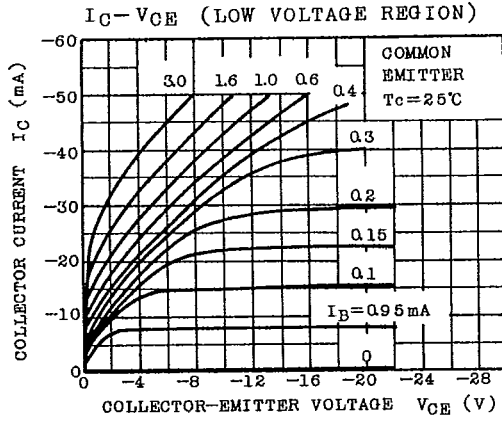
CHARACTERISTIC	SYMBOL	RATING	UNIT
Thermal Resistance (Junction-Ambient)	R _{θJA}	78.3	°C/W
Thermal Resistance (Junction-Case)	R _{θJC}	25	°C/W

TOSHIBA CORPORATION

TBF870 • TBF872

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	TBF870	ICBO VCB=-200V, IE=0	-	-	-0.1	μA
	TBF872	ICER VCE=-250V, RBE=2.7kΩ	-	-	-0.05	
Emitter Cut-off Current	IEBO	VEB=-5V, IC=0	-	-	-10	μA
Collector-Emitter Breakdown Voltage	TBF870	V(BR)CEO IC=-1mA, IB=0	-250	-	-	V
	TBF872	V(BR)CER IC=-1μA, RBE=2.7kΩ	-300	-	-	
High Temperature Collector Cut-off Current	ICER	VCE=-200V, RBE=2.7kΩ Tj=150°C	-	-	-10	μA
DC Current Gain	hFE	VCE=-20V, IC=-25mA	50	-	-	
Collector-Emitter RF Saturation Voltage	VCE(sat) RF	IC=-25mA, Tj=150°C	-	-20	-	V
Base-Emitter Voltage	VBE	VCE=-20V, IC=-25mA	-	-0.75	-	V
Transition Frequency	fT	VCE=-10V, IC=-10mA	60	80	-	MHz
Reverse Transfer Capacitance	Cre	VCB=-30V, IE=0, f=1MHz	-	1.7	2.0	pF



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