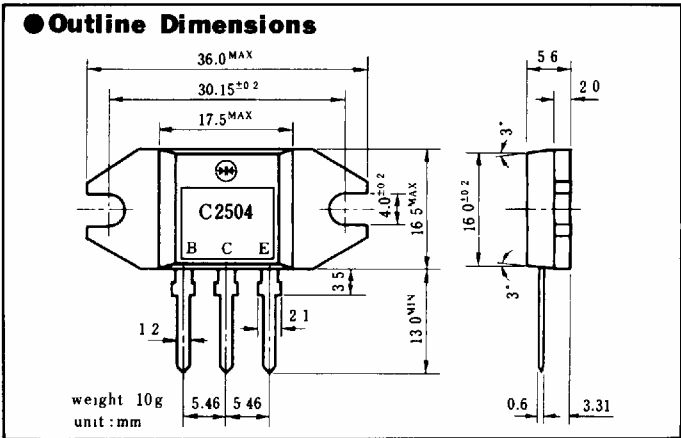


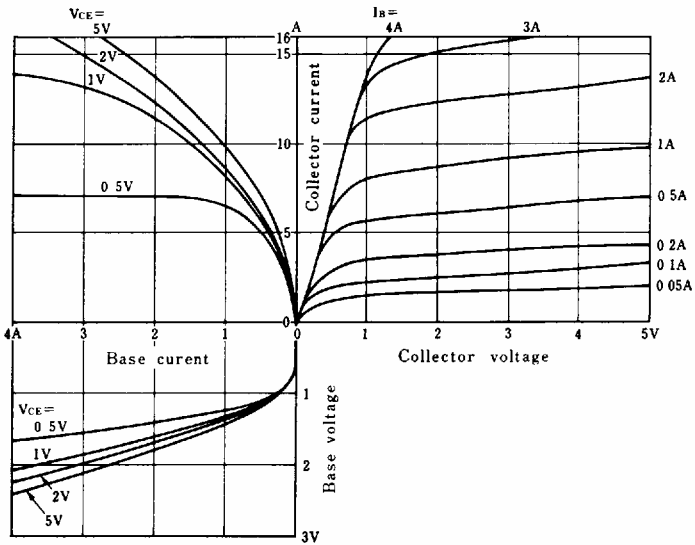
100W
T10V F1



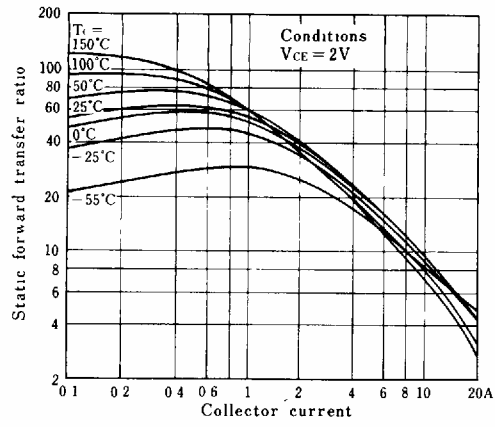
● Ratings

Item		Symbol	EIAJ. No. House. No. Conditions	2SC2504 T10V40F1	Unit
Absolute Maximum Ratings	Storage Temperature	Tstg		-55 ~ +150	°C
	Junction Temperature	Tj		+150	°C
	Collector to Base Voltage	V _{CB0}		500	V
	Collector to Emitter Voltage	V _{CE0}		400	V
	Emitter to Base Voltage	V _{EB0}		7	V
	Collector Current	DC	I _C	10	A
		Peak	I _{CP}	20	A
	Base Current	DC	I _B	4	A
		Peak	I _{BP}	8	A
	Transistor Dissipation	P _T	T _C = 25°C	100	W
Electrical Characteristics (T _C = 25°C)	Collector to Emitter Sustaining Voltage	V _{CE0(sus)}	I _C = 0.2A	MIN 400	V
	Collector Cut-off Current	I _{CB0}	At Rated Voltage	MAX 0.1	mA
		I _{CEO}	At Rated Voltage × 0.8	MAX 0.1	
	Emitter Cut-off Current	I _{EB0}	At Rated Voltage	MAX 1	mA
	Static Forward Transfer Ratio	h _{FE1}	V _{CE} = 2V I _C = 5A	MIN 15	
				STD 20	
		h _{FE2}	V _{CE} = 2V I _C = 10A	MIN 8	
				STD 10	
	Collector to Emitter Saturation Voltage	V _{CE(sat)}	I _C = 5A	STD 0.4	V
			I _B = 0.5A	MAX 0.7	
	Base to Emitter Saturation Voltage	V _{BE(sat)}		STD 1	V
				MAX 1.5	
	Junction to Case Thermal Resistance	θ _{JC}	Between Junction and Case	MAX 1.25	°C/W
	Gain Bandwidth Product	f _T	V _{CE} = 10V I _C = 1A	STD 20	MHz
	Turn on Time	t _{on}	I _{B1} = I _{B2} = 1A I _C = 5A	STD 0.7	μS
			R _L = 5Ω	MAX 1	
	Storage Time	t _s	V _{BE2} = 4V	STD 2.4	μS
				MAX 3	
	Fall Time	t _f		STD 0.5	μS
				MAX 0.7	

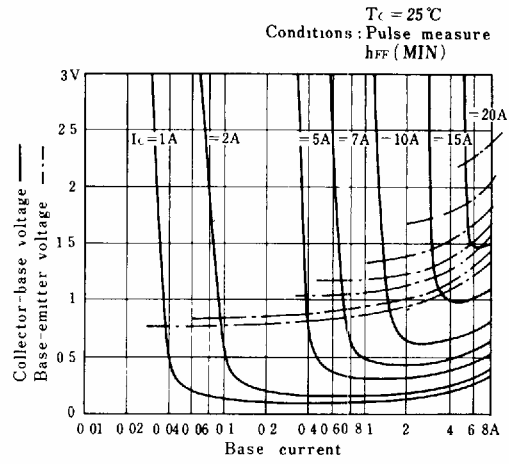
● Input Output transmission characteristics



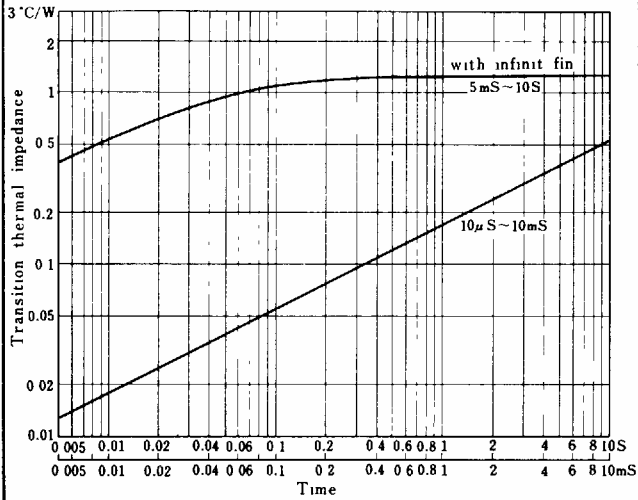
●Static forward transfer ratio vs temp. characteristics



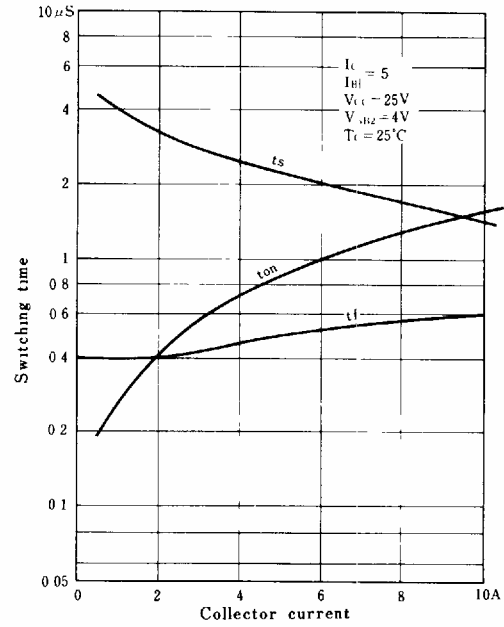
●Saturation voltage characteristics



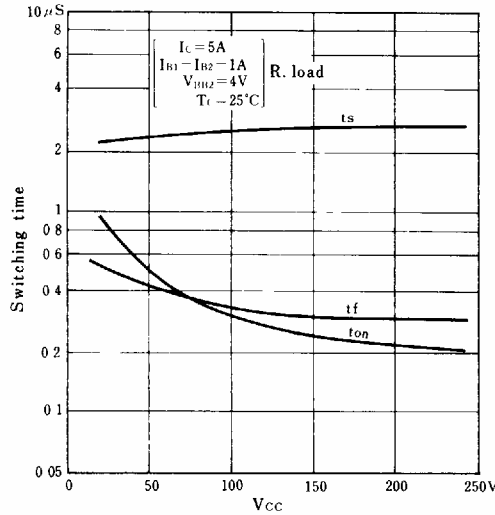
●Transition heat impedance



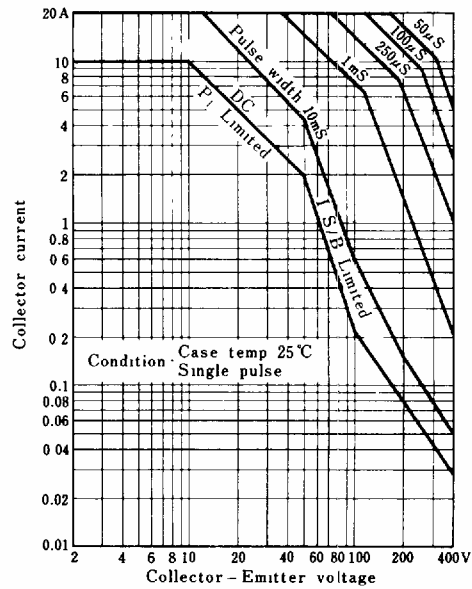
●Collector current vs Switching time



●Vcc vs Switching time



●Safe operating zone



●Dissipation and Is/B derating curve

