2SC4793

NPN SILICON TRANSISTOR

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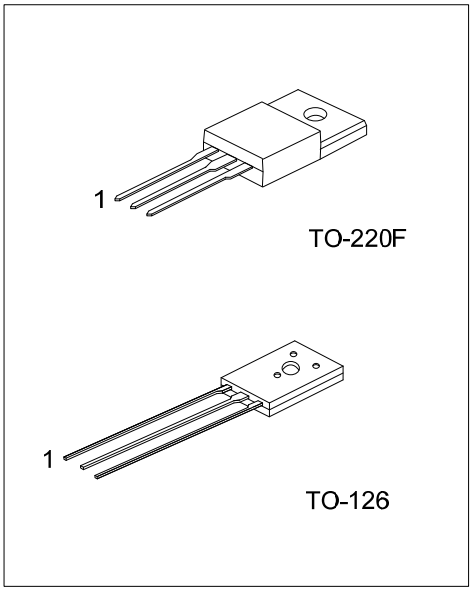


■ FEATURES

*High transition frequency
*Power amplifier applications
*Driver stage amplifier applications

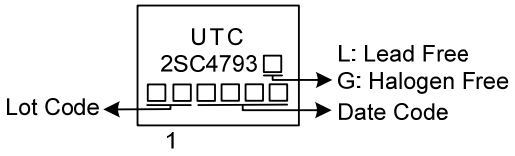
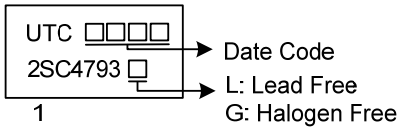
■ ORDERING INFORMATION

Order Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
2SC4793L-x-TF3-T	2SC4793G-x-TF3-T	TO-220F	B	C	E	Tube
2SC4793L-x-T60-K	2SC4793G-x-T60-K	TO-126	E	C	B	Bulk

Note: Pin Assignment: B: Base C: Collector E: Emitter

2SC4793G-x-TF3-T (1)Packing Type (2)Package Type (3)Rank (4)Green Package	(1) T: Tube, K: Bulk (2) TF3: TO-220F, T60: TO-126 (3) refer to Classification of h_{FE} (4) G: Halogen Free and Lead Free, L: Lead Free

■ MARKING

TO-220F	TO-126
	

■ ABSOLUTE MAXIMUM RATINGS (T_A=25°C, unless others specified)

PARAMETER			SYMBOL	RATINGS	UNIT
Collector-Base Voltage			V_{CBO}	230	V
Collector-Emitter Voltage			V_{CEO}	230	V
Emitter-Base Voltage			V_{EBO}	5	V
Collector Current			I_C	1	A
Base Current			I_B	0.1	A
Collector Power Dissipation	T_A=25°C	TO-220F	P_C	2.0	W
		TO-126		1.4	W
	T_C=25°C	TO-220F		20	W
		TO-126		16	W
Junction Temperature			T_J	+150	°C
Storage Temperature Range			T_{STG}	-55 ~ +150	°C

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS (T_A=25°C, unless others specified)

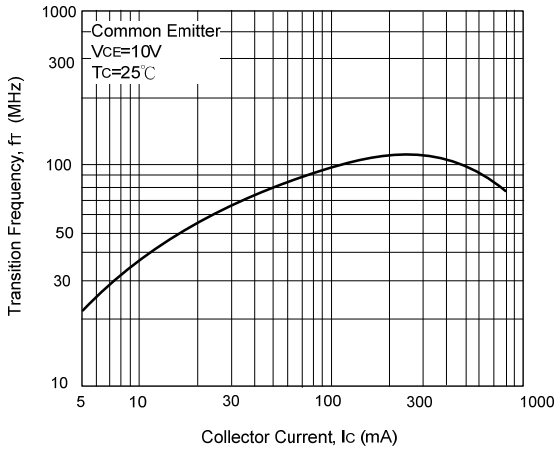
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Emitter Breakdown Voltage	BV_{CEO}	I_C=10mA, I_B=0	230			V
Base -Emitter Voltage	V_{BE}	V_{CE}=5V, I_C=500mA			1.0	V
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	I_C=500mA, I_B=50mA			1.5	V
Collector Cut-off Current	I_{CBO}	V_{CB} =230V, I_E=0			1.0	μA
Emitter Cut-off Current	I_{EBO}	V_{EB}=5V, I_C=0			1.0	μA
DC Current Gain	h_{FE}	V_{CE}=5V, I_C=100mA	100		320	
Transition Frequency	f_T	V_{CE}=10V, I_C=100mA		100		MHz
Collector Output Capacitance	Cob	V_{CB}=10V, I_E=0, f=1MHz		20		pF

■ CLASSIFICATION OF h_{FE}

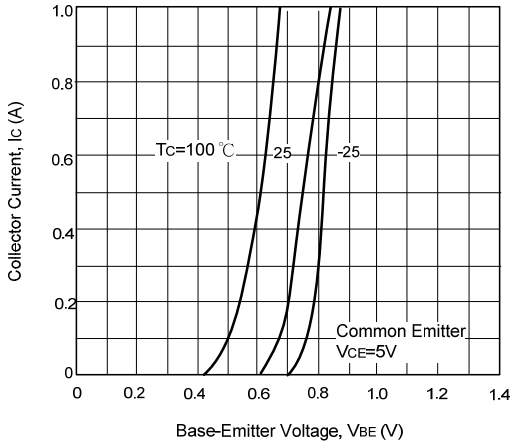
RANK	A	B
RANGE	100-200	180-320

■ TYPICAL CHARACTERISTICS

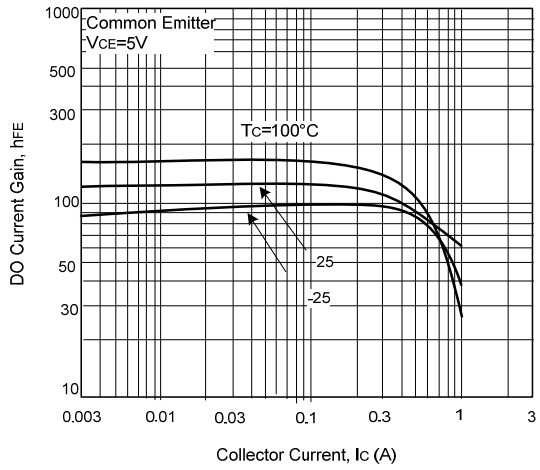
Transition Frequency vs. Collector Current



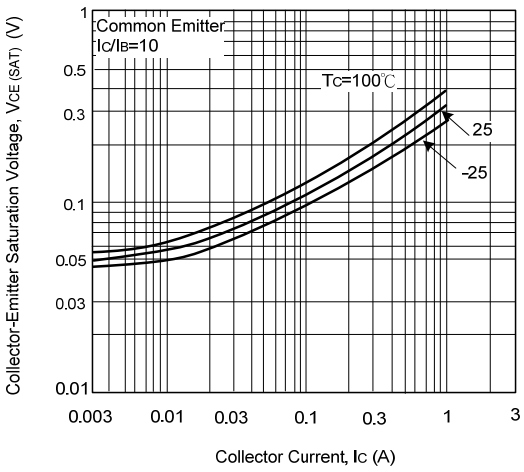
Collector Current vs. Base-Emitter Voltage



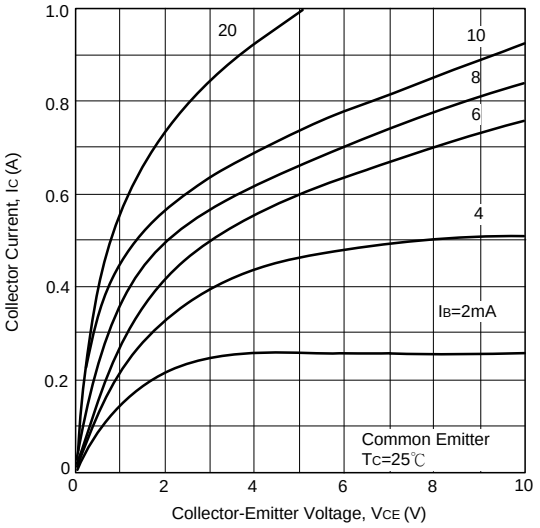
DC Current Gain vs. Collector Current



Collector-Emitter Saturation Voltage vs. Collector Current



Collector Current vs. Collector-Emitter Voltage



Safe Operating Area