

S2000A

SILICON NPN TRIPLE DIFFUSED MESA TYPE

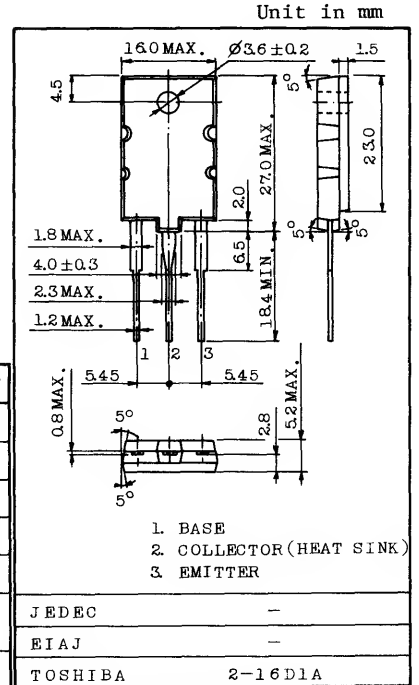
COLOR TV HORIZONTAL OUTPUT APPLICATIONS.
 COLOR TV SWITCHING REGULATOR APPLICATIONS.

FEATURES:

- . High Voltage : $V_{CES}=1500V$
- . Low Saturation Voltage : $V_{CE(sat)}=1V$ (Max.)
- . Fall Time : $t_f=0.7\mu s$ (Typ.)
- . Glass Passivated Collector-Base Junction

MAXIMUM RATINGS ($T_a=25^\circ C$)

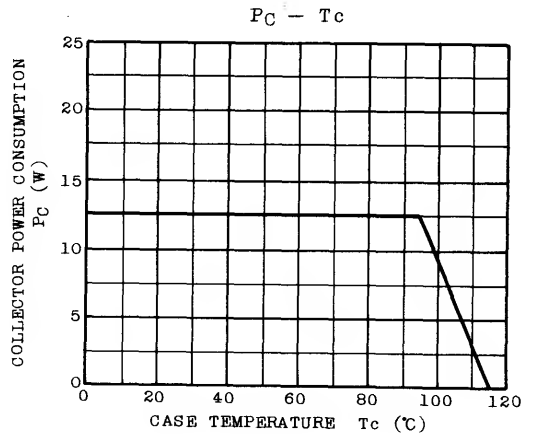
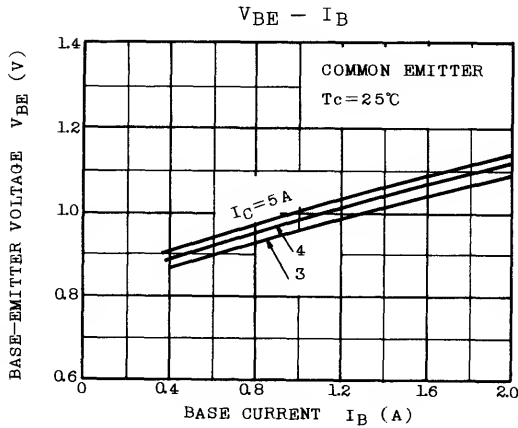
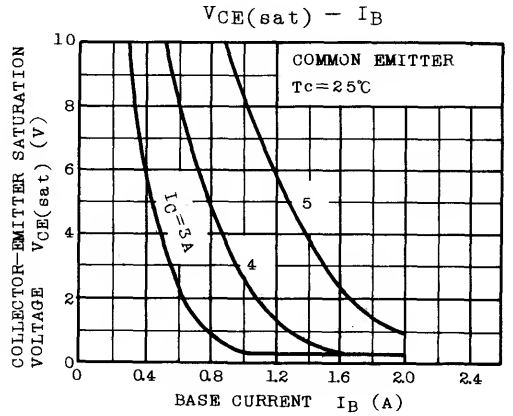
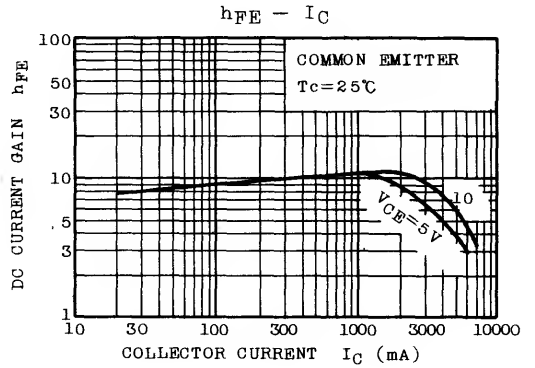
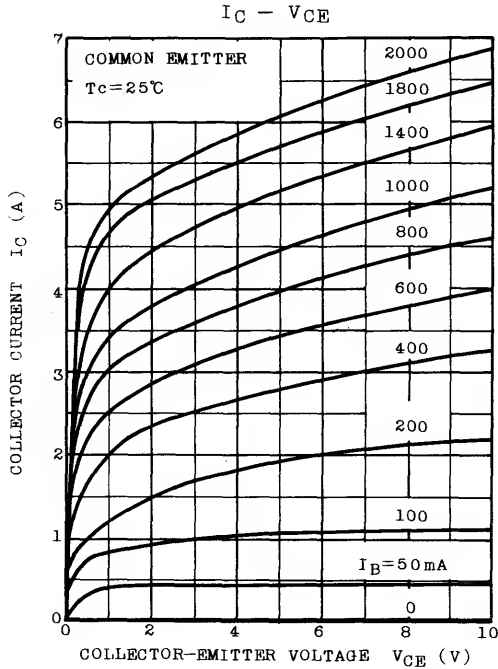
CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Emitter Voltage	V_{CES}	1500	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	DC	I_C	5 A
	Peak	I_{CM}	7.5 A
Base Current (Peak)	I_{BM}	4	A
Total Power Dissipation ($T_c \leq 95^\circ C$)	P_{tot}	12.5	W
Junction Temperature	T_j	+115	$^\circ C$
Storage Temperature Range	T_{stg}	-55 ~ +115	$^\circ C$
Thermal Resistance	$R_{th(j-c)}$	1.6	$^\circ C/W$



Weight : 5.2g

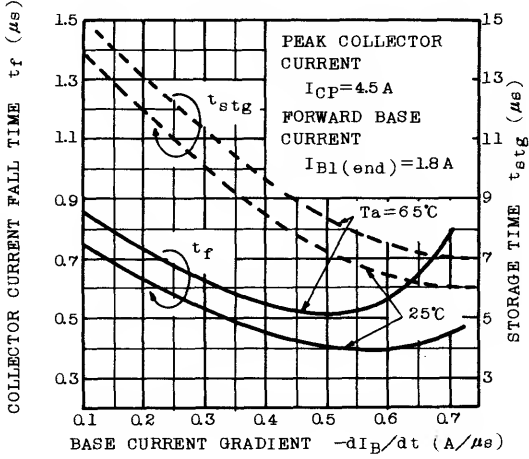
ELECTRICAL CHARACTERISTICS ($T_a=25^\circ C$)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CES}	$V_{CE}=1500V, V_{BE}=0$	-	-	1	mA
Emitter-Base Breakdown Voltage	$V_{(BR)EBO}$	$I_E=1mA, I_C=0$	5	-	-	V
DC Current Gain	h_{FE}	$V_{CE}=5V, I_C=4.5A$	2.25	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=4.5A, I_B=2A$	-	-	1	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=4.5A, I_B=2A$	-	-	1.5	V
Collector-Emitter Sustaining Voltage	$V_{CEO(SUS)}$	$I_C=100mA, I_B=0, L=25mH$	700	-	-	V
Transition Frequency	f_T	$V_{CE}=5V, I_C=0.1A$	-	7	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$	-	125	-	pF
Switching Time	Fall Time	t_f	-	0.7	-	μs
	Storage Time	t_{stg}	-	10	-	μs

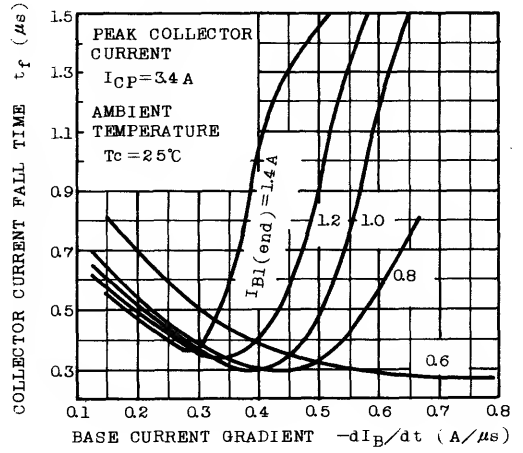


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TYPICAL DRIVE CONDITION DATA



DRIVE CONDITION DATA



DRIVE CONDITION DATA

