

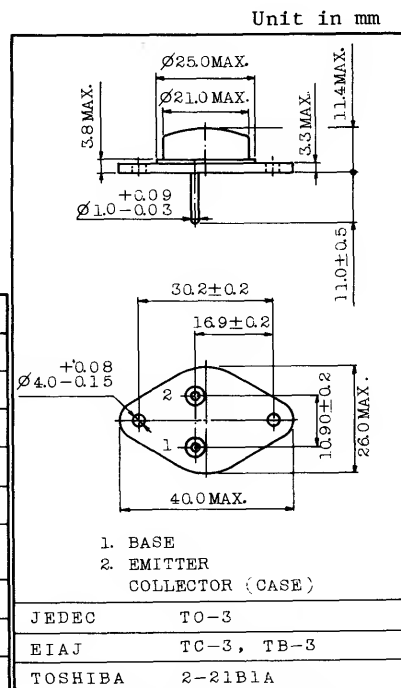
COLOR TV HORIZONTAL OUTPUT APPLICATIONS.

FEATURES:

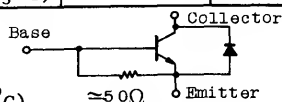
- High Voltage : $V_{CES}=1500V$
- Low Saturation Voltage : $V_{CE(sat)}=5V(\text{Max.})$
- High Speed : $t_f=0.7\mu s$ (Typ.)
- Built-in Damper Type.
- Glass Passivated Collector-Base Junction.

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	2.5	A
	Peak	I_{CM}	3	A
Base Current (Peak)		I_{BM}	2.5	A
Total Power Dissipation ($T_c \leq 95^\circ C$)		P_{tot}	10	W
Junction Temperature		T_j	$+115$	$^\circ C$
Storage Temperature Range		T_{stg}	$-65 \sim 115$	$^\circ C$
Thermal Resistance		$R_{th(j-c)}$	1.6	$^\circ C/W$



EQUIVALENT CIRCUIT



Mounting Kit No. AC42C
Weight : 17.0g

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		$V_{(BR)EBO}$	$I_E=200mA, I_C=0$	5	-	-	V
DC Current Gain		h_{FE}	$V_{CE}=5V, I_C=2A$	2	-	-	
Collector-Emitter Saturation Voltage		$V_{CE(sat)}$	$I_C=2A, I_B=1A$	-	-	5	V
Base-Emitter Saturation Voltage		$V_{BE(sat)}$	$I_C=2A, I_B=1A$	-	-	1.5	V
Forward Voltage (Diode)		$-V_F$	$I_F=3.5A$	-	1.4	2.0	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}	$V_{CB}=10V, I_E=0, f=1MHz$	-	95	-	pF
Switching Time	Fall Time	t_f	$I_{CM}=2A, I_B(\text{end})=1A$	-	0.7	1.0	μs
	Storage Time	t_{stg}	$I_{CM}=2A, I_B(\text{end})=1A$	-	7	-	μs

