

9097250 TOSHIBA (DISCRETE/OUTPUT)

SILICON NPN TRIPLE DIFFUSED MESA TYPE

S2818 S2818A

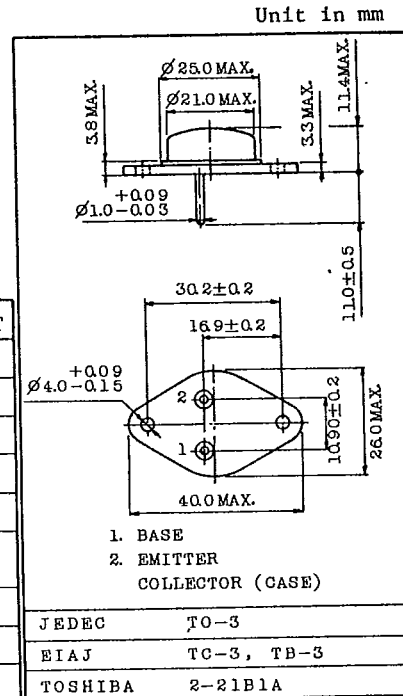
COLOR TV HORIZONTAL OUTPUT APPLICATIONS.

FEATURES:

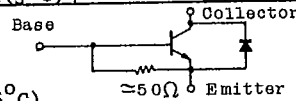
- . High Voltage : $V_{CES}=1500V$
- . Low Saturation Voltage : $V_{CE(sat)}=1V$ (Max.) (S2818A)
- . High Speed : $t_f=0.7\mu s$ (Typ.)
- . Built-in Damper Type.
- . Glass Passivated Collector-Base Junction.

MAXIMUM RATINGS (Ta=25°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 (Tc ≤ 95°C)	P_{tot}	12.5	W
Junction Temperature	T_j	+115	°C
Storage Temperature Range	T_{stg}	-65 ~ 115	°C
Thermal Resistance	$R_{th(j-c)}$	1.6	°C/W



EQUIVALENT CIRCUIT



Mounting Kit No. AC42C

Weight : 17.0g

ELECTRICAL CHARACTERISTICS (Ta=25°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}	$V_{CE}=5V, I_C=4.5A$	2.25	-	-		
Collector-Emitter Saturation Voltage	S2818	$V_{CE(sat)}$	$I_C=4.5A, I_B=2A$	-	-	5	V
	S2818A			-	-	1	
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=4.5A, I_B=2A$	-	-	1.5	V	
Forward Voltage (Diode)	$-V_F$	$I_F=5A$	-	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}	$V_{CB}=10V, I_E=0, f=1MHz$	-	125	-	pF	
Switching Time	Fall Time	t_f	-	0.7	-	μs	
	Storage Time	t_{stg}	-	10	-	μs	

TOSHIBA CORPORATION