

9097250 TOSHIBA (DISCRETE/OPTO)
SILICON NPN TRIPLE DIFFUSED TYPE
(DARLINGTON POWER)

56C 07976 0 T-33-29

2SD1460

HIGH CURRENT SWITCHING APPLICATIONS.

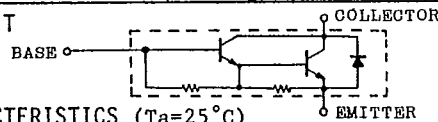
FEATURES:

- High Collector Current : $I_C=30A$
- High DC Current Gain : $h_{FE}=1000(\text{Min.})(V_{CE}=5V, I_C=20A)$
- Monolithic Construction with Built-In Base-Emitter Shunt Resistor.

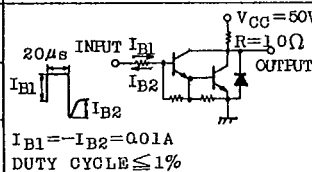
MAXIMUM RATINGS ($T_a=25^\circ\text{C}$)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CB0}	100	V
Collector-Emitter Voltage	V_{CE0}	100	V
Emitter-Base Voltage	V_{EB0}	5	V
Collector Current	I_C	30	A
Base Current	I_B	5	A
Collector Power Dissipation ($T_c=25^\circ\text{C}$)	P_C	200	W
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-65 ~ 150	$^\circ\text{C}$

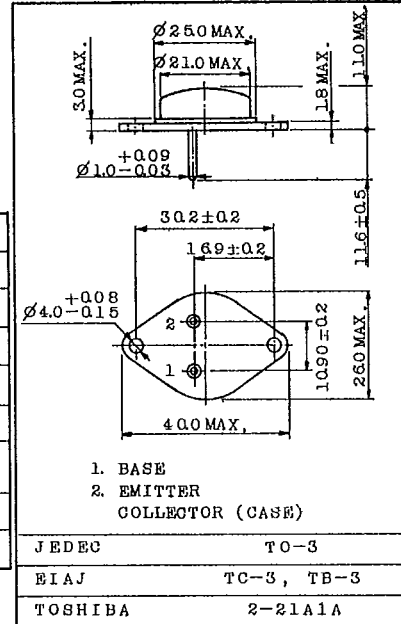
EQUIVALENT CIRCUIT

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

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB}=100V, I_E=0$	-	-	100	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB}=5V, I_C=0$	-	-	10	mA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=50\text{mA}, I_B=0$	100	-	-	V
DC Current Gain	$h_{FE(1)}$	$V_{CE}=5V, I_C=20A$	1000	-	-	
	$h_{FE(2)}$	$V_{CE}=5V, I_C=30A$	200	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=20A, I_B=0.2A$	-	-	1.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-	-	2.0	V
Emitter-Collector Forward Voltage	V_{ECF}	$I_E=10A, I_B=0$	-	-	3	V
Transition Frequency	f_T	$V_{CE}=5V, I_C=1A$	-	10	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1\text{MHz}$	-	500	-	pF
Switching Time	Turn on Time	t_{on}	-	1.5	-	μs
	Storage Time	t_{stg}	-	10	-	μs
	Fall Time	t_f	-	1.5	-	μs



Unit in mm



Mounting Kit No. AC73
Weight : 13g

TOSHIBA CORPORATION

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