

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

56C 07976 D T-33-29

2SD1460

HIGH CURRENT SWITCHING APPLICATIONS:

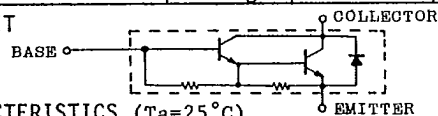
FEATURES:

- . 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.

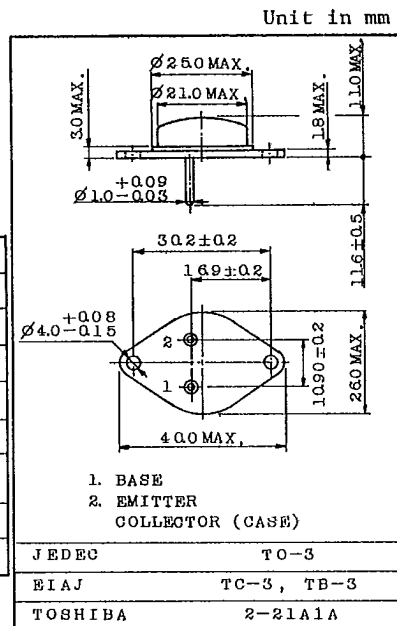
MAXIMUM RATINGS (Ta=25°C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V _{CBO}	100	V
Collector-Emitter Voltage	V _{CEO}	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°C)	P _C	200	W
Junction Temperature	T _j	150	°C
Storage Temperature Range	T _{stg}	-65~150	°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 Breakdwon Voltage		$V_{(BR)CEO}$	$I_C=50mA, I_B=0$	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}	$V_{CB}=10V, I_E=0, f=1MHz$	-	500	-	pF
Switching Time	Turn on Time	t_{on}	$V_{CC}=50V$ $R_C=10\Omega$ I_{B1} I_{B2} I_{B2}	-	1.5	-	μs
	Storage Time	t_{stg}		-	10	-	
	Fall Time	t_f		$I_{B1}=-I_{B2}=0.01A$ DUTY CYCLE $\leq 1\%$	-	1.5	

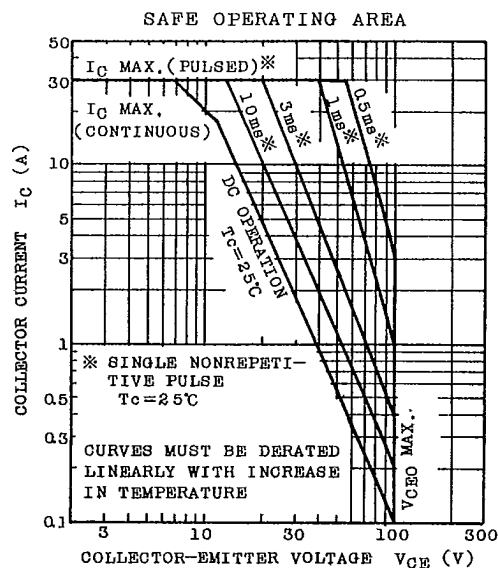
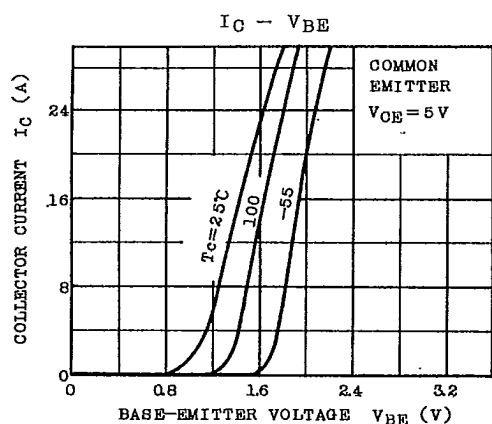
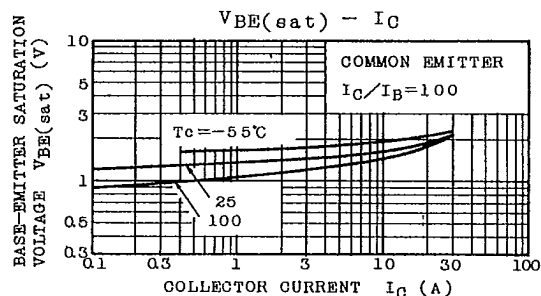
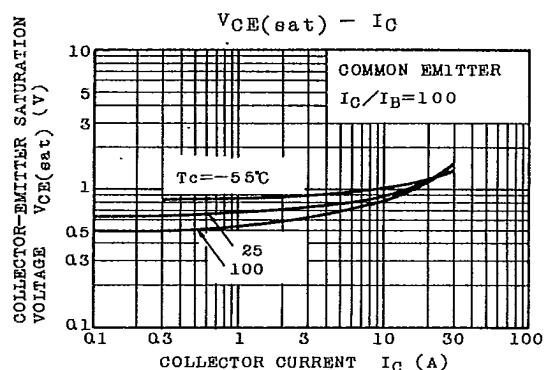
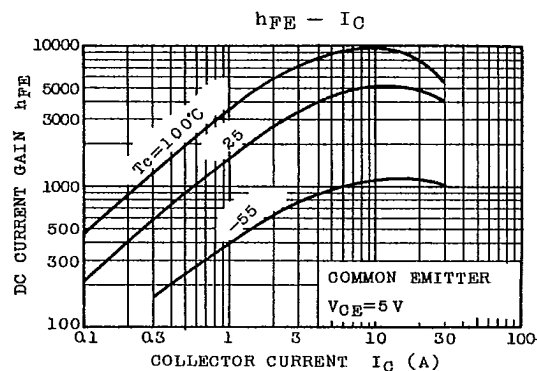
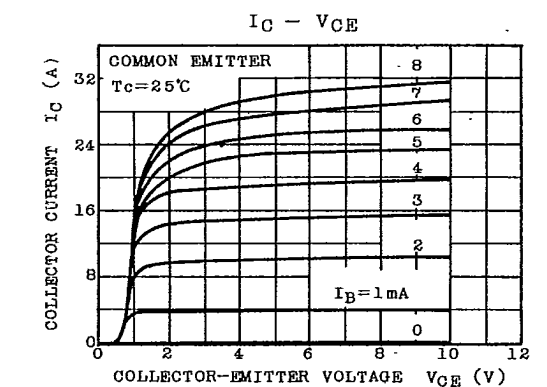


Mounting Kit No. AC73
Weight : 13g

TOSHIBA CORPORATION

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