

2SD797

SILICON NPN TRIPLE DIFFUSED TYPE

HIGH POWER AMPLIFIER APPLICATIONS.
HIGH POWER SWITCHING APPLICATIONS.
DC-DC CONVERTER APPLICATIONS.
REGULATOR APPLICATIONS.

FEATURES:

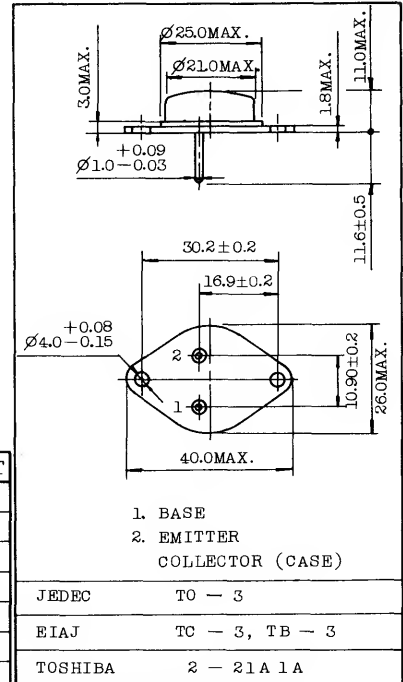
- High Power Dissipation : $P_C=200W$ ($T_C=25^\circ C$)
- High Collector Current : $I_C=30A$

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CB0}	100	V
Collector-Emitter Voltage	V_{CE0}	80	V
Emitter-Base Voltage	V_{EB0}	7	V
Collector Current	I_C	30	A
Base Current	I_B	8	A
Collector Power Dissipation ($T_C=25^\circ C$)	P_C	200	W
Junction Temperature	T_j	175	$^\circ C$
Storage Temperature Range	T_{stg}	-65~175	$^\circ C$

INDUSTRIAL APPLICATIONS

Unit in mm

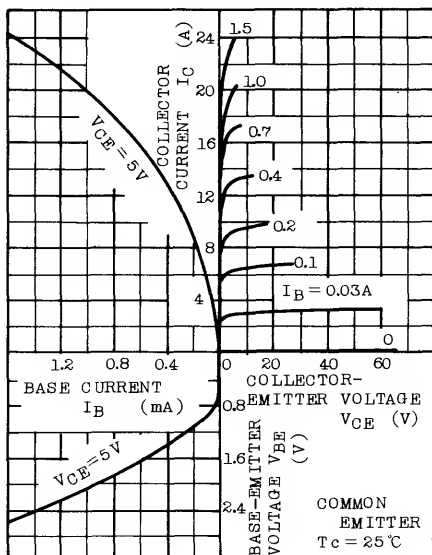


Mounting Kit No. AC73
Weight : 12.9g

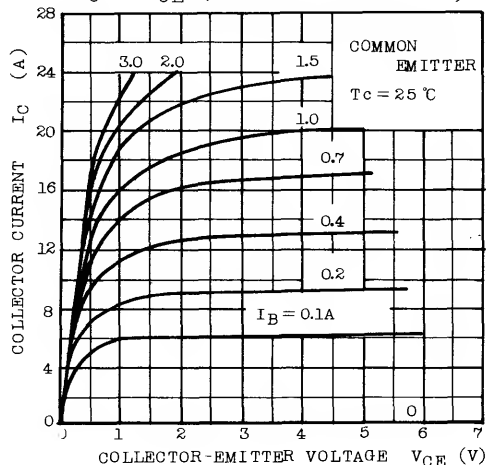
ELECTRICAL CHARACTERISTICS ($T_a=25^\circ C$)

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}	$V_{EB}=7V, I_C=0$	-	-	100	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C=50mA, I_B=0$	80	-	-	V
DC Current Gain	$h_{FE(1)}$ (Note)	$V_{CE}=5V, I_C=1A$	60	-	200	
	$h_{FE(2)}$	$V_{CE}=5V, I_C=15A$	10	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=15A, I_B=3A$	-	0.6	1.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$		-	1.4	2.5	V
Transition Frequency	f_T	$V_{CE}=5V, I_C=1A$	-	1.5	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10V, I_E=0, f=1MHz$	-	400	-	pF
Switching Time	Turn-on Time		-	2.5	-	μs
	Storage Time		-	6	-	
	Fall Time		-	1.5	-	

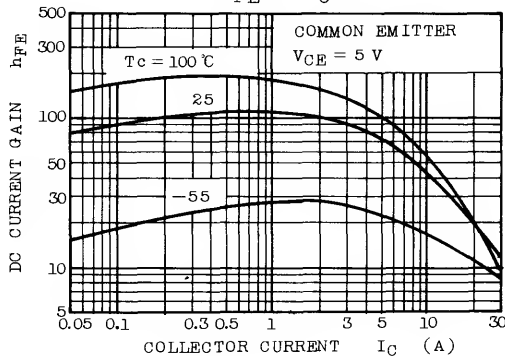
STATIC CHARACTERISTICS



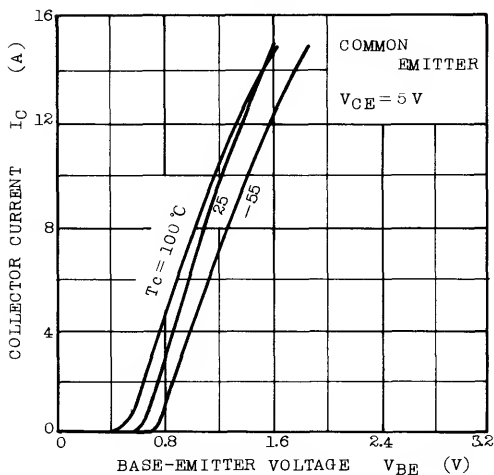
$I_C - V_{CE}$ (LOW VOLTAGE REGION)



$h_{FE} - I_C$



$I_C - V_{BE}$



$V_{CE(sat)} - I_C$

