

2SD799

SILICON NPN TRIPLE DIFFUSED TYPE
(DARLINGTON POWER)

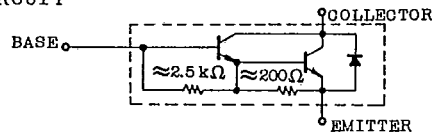
IGNITER APPLICATIONS.
HIGH VOLTAGE SWITCHING APPLICATIONS.
FEATURES:

- High DC Current Gain : $h_{FE}=600(\text{Min.})(V_{CE}=2V, I_C=2A)$
- Monolithic Construction with Built-In Base-Emitter Shunt Resistor.

MAXIMUM RATINGS (Ta=25°C)

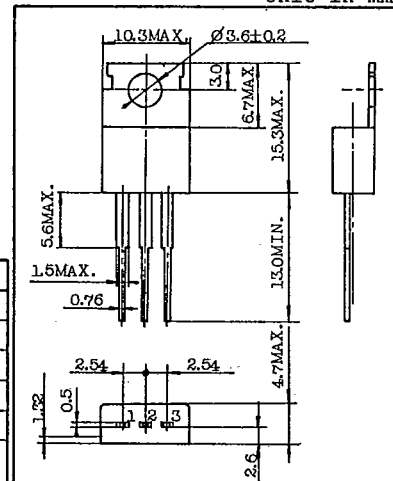
CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CBO}	600	V
Collector-Emitter Voltage	V_{CEO}	400	V
Emitter-Base Voltage	V_{EBO}	5	V
Collector Current	I_C	6	A
Base Current	I_B	1	A
Collector Power Dissipation (Tc=25°C)	P_C	30	W
Junction Temperature	T_j	150	°C
Storage Temperature Range	T_{stg}	-55~150	°C

EQUIVALENT CIRCUIT



INDUSTRIAL APPLICATIONS

Unit in mm



1. BASE
2. COLLECTOR (HEAT SINK)
3. EMITTER

JEDEC	TO - 220 AB
EIAJ	SC - 46
TOSHIBA	2 - 10 A 1 A

Mounting Kit No. AC75

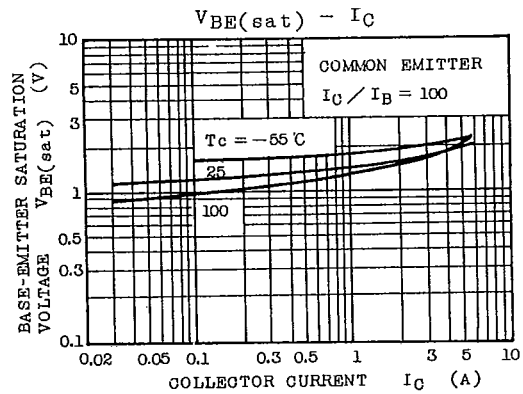
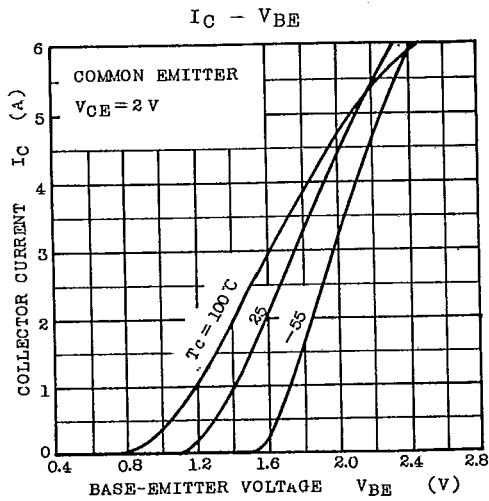
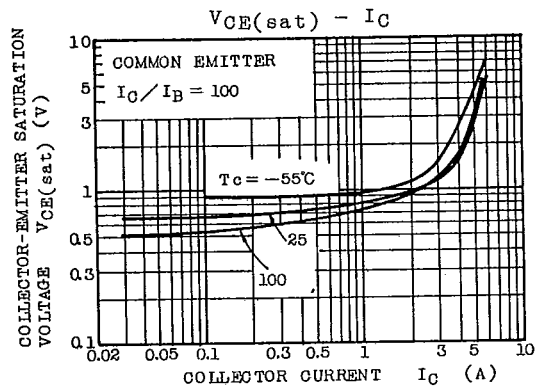
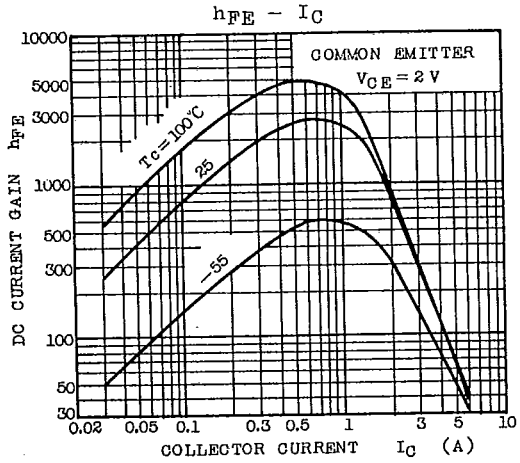
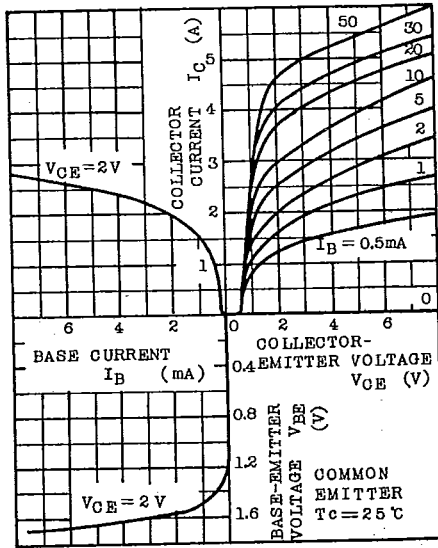
Weight : 1.9g

ELECTRICAL CHARACTERISTICS (Ta=25°C)

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		I_{CBO}	$V_{CB}=600V, I_E=0$	-	-	0.5	mA
Emitter Cut-off Current		I_{EBO}	$V_{EB}=5V, I_C=0$	-	-	3	mA
Collector-Emitter Breakdown Voltage		$V(BR)_{CEO}$	$I_C=10mA, I_B=0$	400	-	-	V
DC Current Gain		$h_{FE}(1)$	$V_{CE}=2V, I_C=2A$	600	-	-	
		$h_{FE}(2)$	$V_{CE}=2V, I_C=4A$	100	-	-	
Collector-Emitter Saturaton Voltage		$V_{CE(sat)}$	$I_C=4A, I_B=0.04A$	-	-	2.0	V
Base-Emitter Saturation Voltage		$V_{BE(sat)}$	$I_C=4A, I_B=0.04A$	-	-	2.5	V
Emitter-Collector Forward Voltage		V_{ECF}	$I_E=4A, I_B=0$	-	-	3.0	V
Collector Output Capacitance		C_{ob}	$V_{CB}=50V, I_E=0, f=1MHz$	-	35	-	pF
Switching Time	Turn-on Time	t_{on}		-	1	-	µs
	Storage Time	t_{stg}		-	8	-	
	Fall Time	t_f		-	5	-	

TOSHIBA CORPORATION

STATIC CHARACTERISTICS



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