

2SC3258

Unit in mm

- . Low Collector Saturation Voltage :
 $V_{CE(sat)} = 0.4V(\text{Max.})$ at $I_C = 3A$
- . High Speed Switching Time : $t_{stg} = 1.0\mu s(\text{Typ.})$
- . Complementary to 2SA1293.

The drawing consists of three views of the 2SA101A transistor:

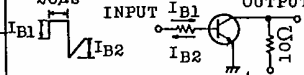
- Top View:** Shows a square package with a central circular hole. Dimensions include a top width of 10.3 MAX., a central hole diameter of $\varnothing 3.6 \pm 0.2$, a top lead width of 1.5 MAX., and a lead pitch of 0.76. The total height from the base to the top of the package is 15.3 MAX., and the mounting hole diameter is 4.7 MAX.
- Side View:** Shows the profile of the package with a total height of 15.3 MAX. and a mounting hole diameter of 4.7 MAX.
- Detail View:** Shows the base, collector, and emitter leads. Dimensions include a base lead width of 1.32, a collector lead width of 0.5, and a mounting hole diameter of 4.7 MAX.

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

JEDEC	TO-220AB
EIAJ	SC-46
TOSHIBA	2-10A1A

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	DC	I _C	5	A
	Pulse	I _{CP}	8	
Collector Power Dissipation (T _c =25°C)		P _C	30	W
Junction Temperature		T _j	150	°C
Storage Temperature Range		T _{stg}	-55~150	°C

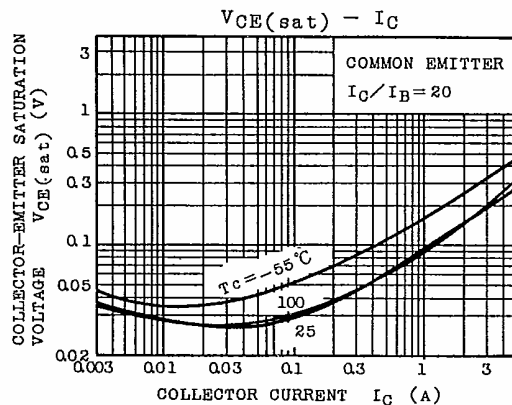
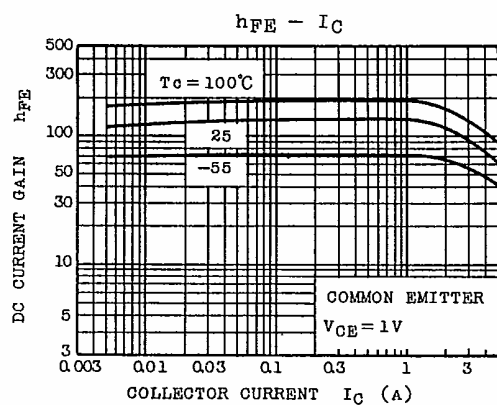
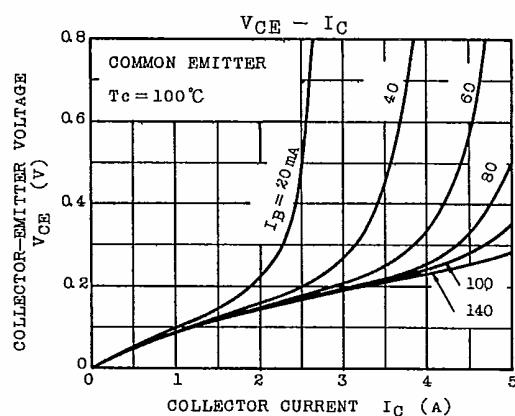
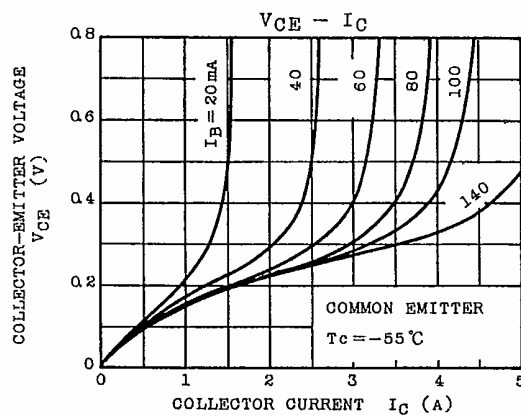
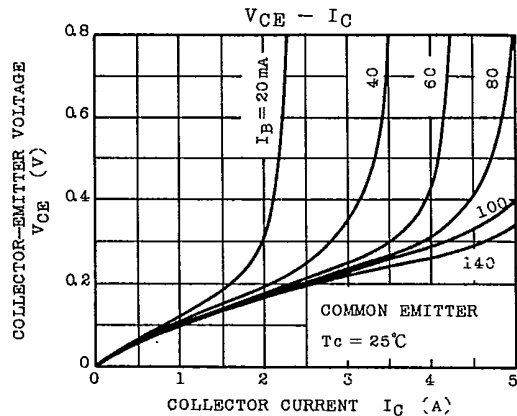
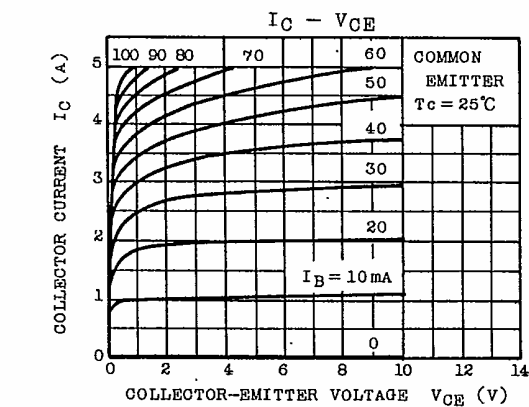
Mounting Kit No. AC75
Weight : 1.9g

CHARACTERISTIC		SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current		ICBO	VCB=100V, IE=0	-	-	1	μA
Emitter Cut-off Current		IEBO	VEB=7V, IC=0	-	-	1	μA
Collector-Emitter Breakdown Voltage		V(BR)CEO	IC=10mA, IB=0	80	-	-	V
DC Current Gain		hFE(1) (Note)	VCE=1V, IC=1A	70	-	240	
		hFE(2)	VCE=1V, IC=3A	40	-	-	
Saturation Voltage	Collector-Emitter	VCE(sat)	IC=3A, IB=0.15A	-	0.2	0.4	V
	Base-Emitter	VBE(sat)		-	0.9	1.2	
Transition Frequency		fT	VCE=4V, IC=1A	-	120	-	MHz
Collector Output Capacitance		Cob	VCB=10V, IE=0, f=1MHz	-	80	-	pF
Switching Time	Turn-on Time	ton	 20μs INPUT I_{B1} I_{B2} OUTPUT 10V VCC ≈ 30V $I_{B1} = -I_{B2} = 0.15A$ DUTY CYCLE ≤ 1%	-	0.2	-	μs
	Storage Time	tstg		-	1.0	-	
	Fall Time	tf			-	0.1	

Note : hFE(1) Classification 0 : 70~140, Y : 120~240

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