

9097250 TOSHIBA (DISCRETE/OPTO)  
 SILICON PNP TRIPLE DIFFUSED TYPE (PCT PROCESS)

56C 07397 DT-33-19

# 2SB1018

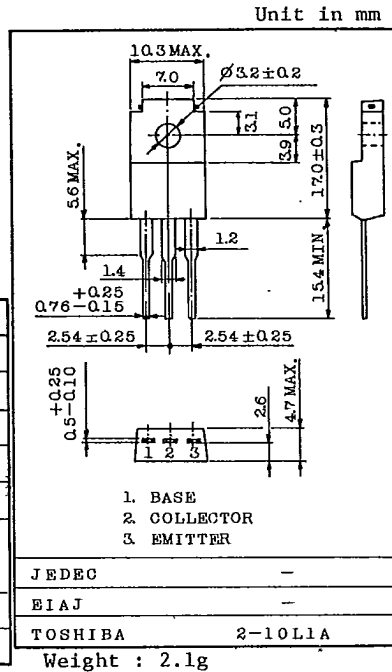
HIGH CURRENT SWITCHING APPLICATIONS.  
 POWER AMPLIFIER APPLICATIONS.

**FEATURES:**

- High Collector Current :  $I_C = -7A$
- Low Collector Saturation Voltage :  $V_{CE(sat)} = -0.5V(\text{Max.})$  at  $I_C = -4A$
- Complementary to 2SD1411

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	-100	V
Collector-Emitter Voltage	$V_{CEO}$	-80	V
Emitter-Base Voltage	$V_{EBO}$	-5	V
Collector Current	$I_C$	-7	A
Base Current	$I_B$	-1	A
Collector Power Dissipation	$P_C$	$T_a = 25^\circ C$	2.0
		$T_c = 25^\circ C$	30
Junction Temperature	$T_j$	150	$^\circ C$
Storage Temperature Range	$T_{stg}$	-55 ~ 150	$^\circ C$



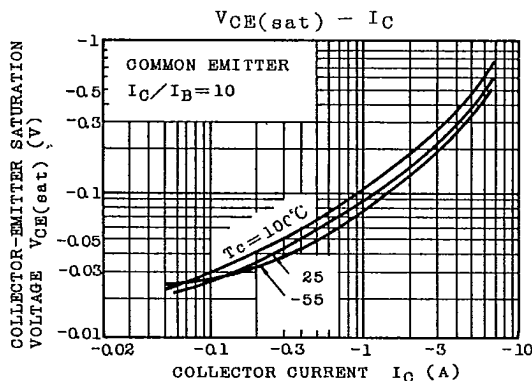
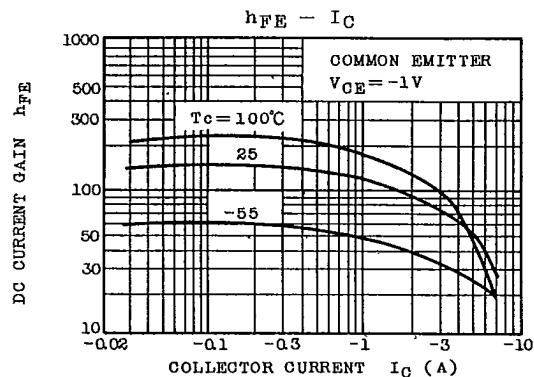
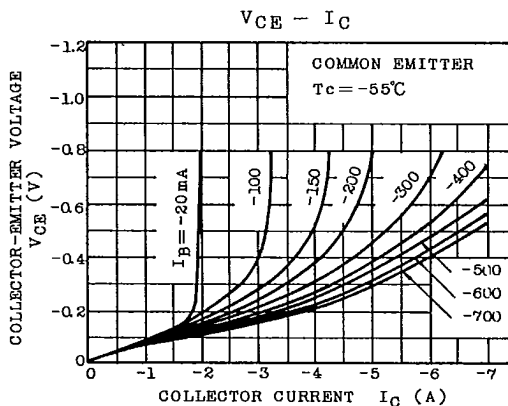
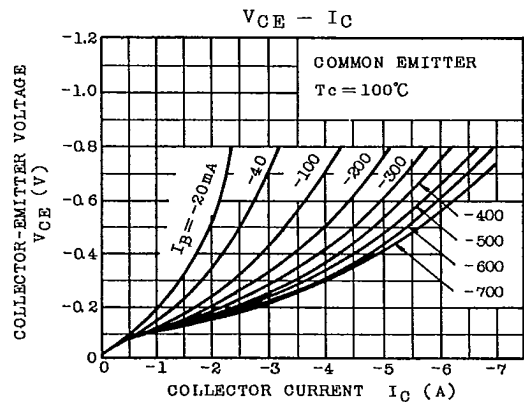
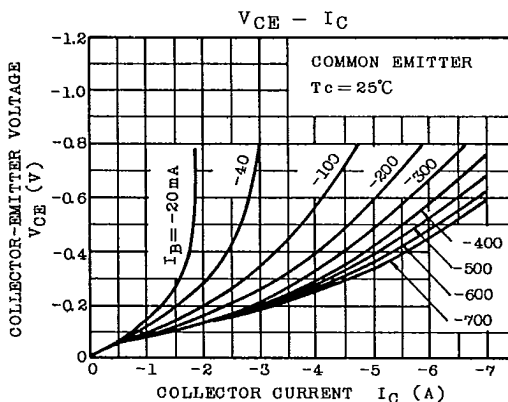
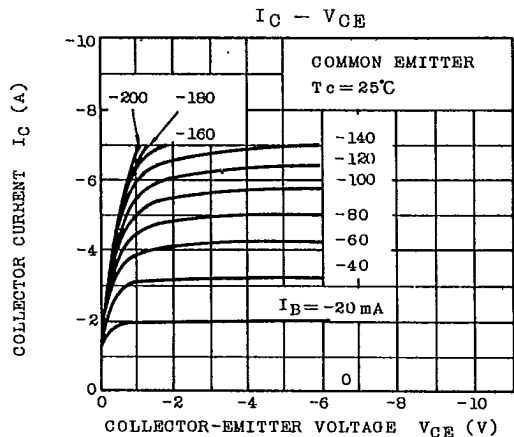
**ELECTRICAL CHARACTERISTICS ( $T_a = 25^\circ C$ )**

CHARACTERISTICS	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT		
Collector Cut-off Current	$I_{CBO}$	$V_{CB} = -100V, I_E = 0$	-	-	-5	$\mu A$		
Emitter Cut-off Current	$I_{EBO}$	$V_{EB} = -5V, I_C = 0$	-	-	-5	$\mu A$		
Collector-Emitter Breakdown Voltage	$V_{(BR)CEO}$	$I_C = -50mA, I_B = 0$	-80	-	-	V		
DC Current Gain	$h_{FE(1)}$ (Note)	$V_{CE} = -1V, I_C = -1A$	70	-	240			
	$h_{FE(2)}$	$V_{CE} = -1V, I_C = 4A$	30	-	-			
Saturation Voltage	Collector-Emitter	$V_{CE(sat)}$	$I_C = -4A, I_B = -0.4A$	-	-0.3	-0.5	V	
	Base-Emitter	$V_{BE(sat)}$	$I_C = -4A, I_B = -0.4A$	-	-0.9	-1.4		
Transition Frequency	$f_T$	$V_{CE} = -4V, I_C = -1A$	-	10	-	MHz		
Collector Output Capacitance	$C_{ob}$	$V_{CB} = -10V, I_E = 0, f = 1MHz$	-	250	-	pF		
Switching Time	Turn-on Time	$t_{on}$			-	0.4	-	
	Storage Time	$t_{stg}$			-	2.5	-	$\mu s$
	Fall Time	$t_f$			-	0.5	-	

Note :  $h_{FE(1)}$  Classification O : 70 ~ 140. Y : 120 ~ 240

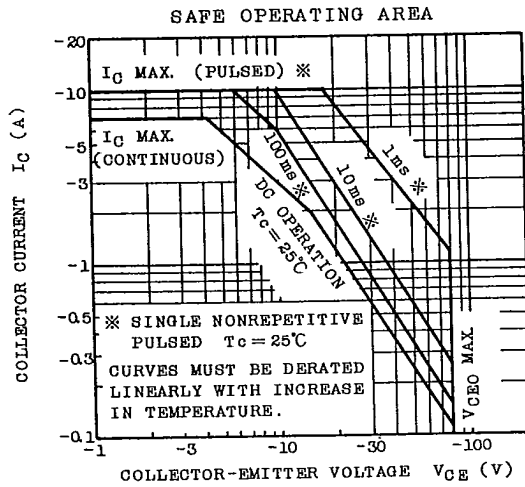
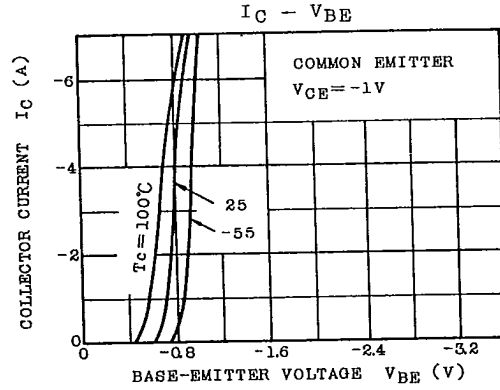
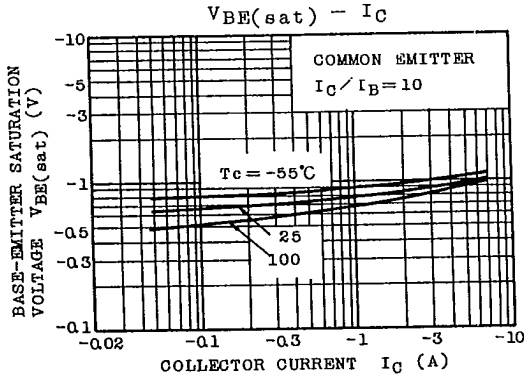
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