

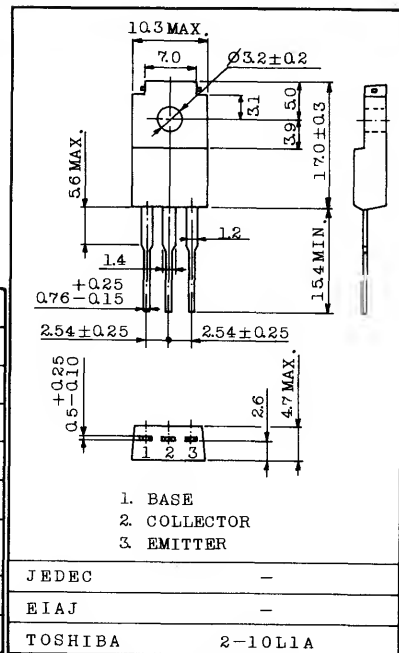
HIGH CURRENT SWITCHING APPLICATIONS.

FEATURES:

- Low 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 2SC3299

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

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector-Base Voltage	V_{CB0}	-60	V
Collector-Emitter Voltage	V_{CE0}	-50	V
Emitter-Base Voltage	V_{EB0}	-5	V
Collector Current	I_C	-5	A
Base Current	I_B	-1	A
Collector Power	$T_a = 25^\circ C$	P_C	2.0
	$T_c = 25^\circ C$		20
Junction Temperature	T_j	150	$^\circ C$
Storage Temperature Range	T_{stg}	-55 ~ 150	$^\circ C$

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

Weight : 2.1g

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT
Collector Cut-off Current	I_{CBO}	$V_{CB} = -50V, I_E = 0$	-	-	-1	μA
Emitter Cut-off Current	I_{EBO}	$V_{EB} = -5V, I_C = 0$	-	-	-1	μA
Collector-Emitter Breakdown Voltage	$V_{(BR)CE0}$	$I_C = -10mA, I_B = 0$	-50	-	-	V
DC Current Gain	$h_{FE(1)}$ (Note)	$V_{CE} = -1V, I_C = -1A$	70	-	240	
	$h_{FE(2)}$	$V_{CE} = -1V, I_C = -3A$	30	-	-	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = -3A, I_B = -0.15A$	-	-0.2	-0.4	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C = -3A, I_B = -0.15A$	-	-0.9	-1.2	V
Transition Frequency	f_T	$V_{CE} = -4V, I_C = -1A$	-	60	-	MHz
Collector Output Capacitance	C_{ob}	$V_{CB} = -10V, I_E = 0, f = 1MHz$	-	170	-	pF
Switching Time	Turn-on Time	t_{on}	-	0.1	-	μs
	Storage Time	t_{stg}	-	1.0	-	
	Fall Time	t_f	-	0.1	-	

Note : $h_{FE(1)}$ Classification 0 : 70 ~ 140, Y : 120 ~ 240

