

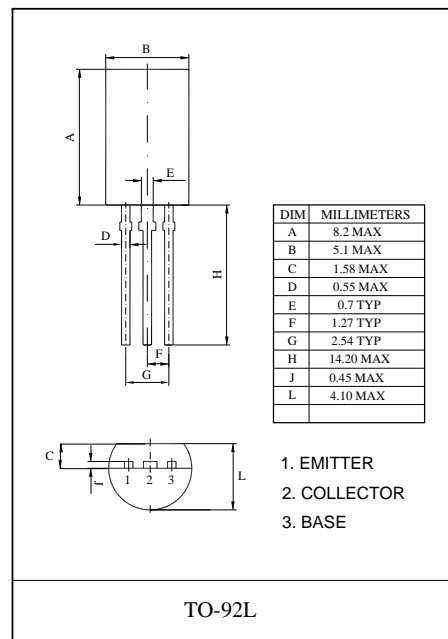
VOLTAGE REGULATORS, RELAY DRIVERS  
LAMP DRIVERS, ELECTRICAL EQUIPMENT

### FEATURES

- Adoption of MBIT processes.
- Low collector- to- emitter saturation voltage.
- Fast switching speed.
- Large current capacity and wide ASO.
- Complementary to FTB985.

### MAXIMUM RATING (Ta=25 °C)

CHARACTERISTIC	SYMBOL	RATING	UNIT
Collector- Base Voltage	$V_{CBO}$	60	V
Collector- Emitter Voltage	$V_{CEO}$	50	V
Emitter- Base Voltage	$V_{EBO}$	6	V
Collector Current	$I_C$	3	A
Collector Current (Pulse)	$I_{CP}$	6	A
Collector Power Dissipation	$P_C$	1	W
Junction Temperature	$T_j$	150	°C
Storage Temperature Range	$T_{stg}$	- 55~ 150	°C



### ELECTRICAL CHARACTERISTICS (Ta=25 °C)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN.	TYP.	MAX.	UNIT.
Collector Cut- off Current	$I_{CBO}$	$V_{CB}=40V, I_E=0$	-	-	1	$\mu A$
Emitter Cut- off Current	$I_{EBO}$	$V_{EB}=4V, I_C=0$	-	-	1	$\mu A$
DC Current Gain	$h_{FE}(1)$ (Note)	$V_{CE}=2V, I_C=100mA$	100	-	400	
	$h_{FE}(2)$	$V_{CE}=2V, I_C=3A$	35	-	-	
Collector- Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=2A, I_B=100mA$	-	0.19	0.5	V
Base- Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=2A, I_B=100mA$	-	0.94	1.2	V
Transition Frequency	$f_T$	$V_{CE}=10V, I_C=50mA$	-	150	-	MHz
Collector Output Capacitance	$C_{ob}$	$V_{CB}=10V, I_E=0, f=1MHz$	-	25	-	pF
Switching Time	Turn- on Time	$t_{on}$	-	70	-	nS
	Storage Time	$t_{stg}$	-	650	-	
	Fall Time	$t_f$	-	35	-	

10IB1=10IB2=IC=1A

Note :  $h_{FE}(1)$  Classification A:100~200, B:140~280, C:200~400

