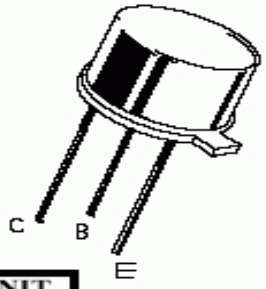
TEAMASIA LAKHI SEMICONDUCTORS LTD

File No. : 4100
Rev. No. : A

DEVICE SPECIFICATION

TYPE : SL100
POLARITY : N P N
APPLICATION : General Purpose Medium Power Transistor
PACKAGE : TO - 39



MAXIMUM RATINGS:

CHARACTERISTIC	SYMBOL	MIN	MAX	UNIT
Collector - Emitter Voltage	BV_{CEO}	50	-	V
Collector - Base Voltage	BV_{CBO}	60	-	V
Emitter - Base Voltage	BV_{EBO}	5.0	-	V
Total Power Dissipation @ T_A= 25°C	P_D		800	mW
Collector Current	I_C		0.5	A
Operating & Storage Junction Temperature	T_j, T_{stg}		- 65 to 200	°C

Electrical characteristics (TA = 25°C, unless otherwise specified)

CHARACTERISTIC	SYMBOL	MIN	MAX	UNIT
OFF CHARACTERISTICS				
Collector - Emitter Breakdown Voltage (I_C = 10 mA dc, I_B = 0)	BV_{CEO}	50	-	V
Collector - Base Breakdown Voltage (I_C = 100 µA, I_E = 0)	BV_{CBO}	60	-	V
Emitter - Base Breakdown voltage (I_E = 100 µA, I_C = 0)	BV_{EBO}	5	-	V
Collector Cut - off Current (V_{CB} = 40V dc, I_E = 0)	I_{CBO}	-	50	nA
Emitter - Cut off current (V_{EB} = 4V dc, I_C= 0)	I_{EBO}	-	25	nA

CHARACTERISTIC	SYMBOL	MIN	MAX	UNIT
ON CHARACTERISTICS *				
DC Current gain				
(I_C = 10mA dc, V_{CE} = 10V dc)	hFE (1)	25	-	
(I_C = 150mA dc, V_{CE} = 10V dc)	hFE	40	300	
Collector - Emitter saturation Voltage (I_C = 150mA dc, I_B = 15mA dc)	VCE(sat)	-	0.6	V
Base - Emitter saturation voltage (I_C = 150mA dc, I_B = 15mA dc)	VBE(sat)	-	1.3	V

CHARACTERISTIC	SYMBOL	MIN	MAX	UNIT
SMALL SIGNAL CHARACTERISTICS				
Output Capacitance (V_{CB} = 10V, I_E = 0, f = 140KHz)	C_{obo}	-	20	pf

hFE Classification	SL 100B
hFE (1)	100 - 300

* Pulse Test : Pulse width ≤ 300 µs , Duty Cycle ≤ 2.0%