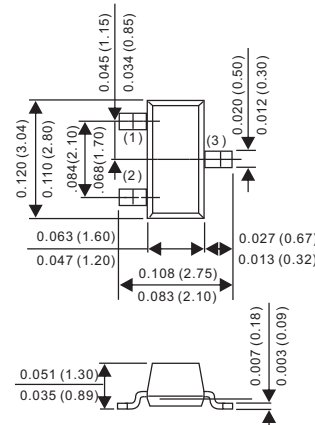


**SOT23****FEATURES**

- High DC current gain : $h_{FE}=200$ (Typ) $V_{CE}=6V, I_C=1mA$
- High voltage: $V_{CEO}=50V$

MAXIMUM RATINGS (Ta=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Collector–Base Voltage	V_{CBO}	60	V
Collector–Emitter Voltage	V_{CEO}	50	V
Emitter–Base Voltage	V_{EBO}	5	V
Collector Current — Continuous	I_C	100	mA
Collector Power Dissipation	P_C	200	mW
Thermal Resistance From Junction To Ambient	R_{thJA}	625	°C/W
Operation Junction and Storage Temperature Range	T_J, T_{stg}	-55~+150	°C



1. BASE
2. EMITTER
3. COLLECTOR

Dimensions in inches and (millimeters)

CLASSIFICATION OF h_{FE}

Rank	L4	L5	L6	L7
Range	90-180	135-270	200-400	300-600
Marking	L4	L5	L6	L7

ELECTRICAL CHARACTERISTICS (TA = 25°C unless otherwise noted.)

Parameter	Symbol	Test conditions	Min	Max	Typ	Unit
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = 100\mu A, I_E = 0$	60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = 1 mA, I_B = 0$	50			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = 100\mu A, I_C = 0$	5			V
Collector cut-off current	I_{CBO}	$V_{CB} = 60V, I_E = 0$		0.1		μA
Emitter cut-off current	I_{EBO}	$V_{EB} = 5V, I_C = 0$		0.1		μA
DC current gain	h_{FE}	$V_{CE} = 6V, I_C = 1mA$	90	600	200	
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = 100mA, I_B = 10mA$		0.3		V
Base-emitter saturation voltage	$V_{BE(sat)}$	$I_C = 100mA, I_B = 10mA$		1		V
Transition frequency	f_T	$V_{CE} = 6V, I_C = 10mA$			250	MHz

Typical Characteristics

