



SOT-23-3L Plastic-Encapsulated Transistors

2SA1464 TRANSISTOR (PNP)

FEATURES

Power dissipation

$$P_{CM} : 0.2 \text{ W (Tamb=25°C)}$$

Collector current

$$I_{CM} : -0.5 \text{ A}$$

Collector-base voltage

$$V_{(BR)CBO} : -60 \text{ V}$$

Operating and storage junction temperature range

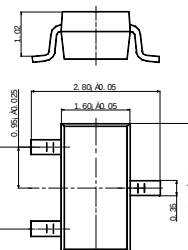
$$T_J, T_{stg} : -55^\circ\text{C to } +150^\circ\text{C}$$

SOT-23-3L

1. EMITTER

2. BASE

3. COLLECTOR



ELECTRICAL CHARACTERISTICS (Tamb=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	$I_C = -100\mu\text{A}, I_E = 0$	-60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	$I_C = -1\text{mA}, I_B = 0$	-40			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	$I_E = -100\mu\text{A}, I_C = 0$	-5			V
Collector cut-off current	I_{CBO}	$V_{CB} = -40 \text{ V}, I_E = 0$			-0.1	μA
Emitter cut-off current	I_{EBO}	$V_{EB} = -4 \text{ V}, I_C = 0$			-0.1	μA
DC current gain	$h_{FE(1)}$	$V_{CE} = -2 \text{ V}, I_C = -150 \text{ mA}$	75	140	300	
DC current gain	$h_{FE(2)}$	$V_{CE} = -2 \text{ V}, I_C = -500 \text{ mA}$	20	50		
Collector-emitter saturation voltage	$V_{CE(sat)}$	$I_C = -500 \text{ mA}, I_B = -50 \text{ mA}$		-0.45	-0.75	V
Base-emitter voltage	$V_{BE(on)}$	$I_C = -500 \text{ mA}, V_{CE} = -50 \text{ V}$		-1.0	-1.3	V
Transition frequency	f_T	$V_{CE} = -10 \text{ V}, I_C = -20 \text{ mA}$	150	400		MHz
Output Capacitance	C_{ob}	$V_{CB} = -10 \text{ V}, I_E = -20 \text{ mA}$		5.0	8.0	pF
Turn-on Time	t_{on}	$V_{CC} = -30 \text{ V}$ $I_C = 150 \text{ mA}$ $I_{B1} = -I_{B2} = 15 \text{ mA}$			35	ns
Storage Time	t_{stg}				225	ns
Turn-off Time	T_{off}				255	ns

CLASSIFICATION OF $h_{FE(1)}$

Marking	Y12	Y13	Y14
Range	75-150	100-200	150-300