

### 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

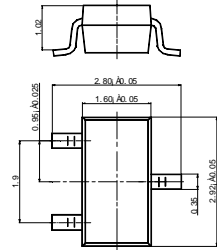
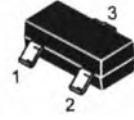
$$V_{(BR)CBO} : -60 \text{ V}$$

Operating and storage junction temperature range

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

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