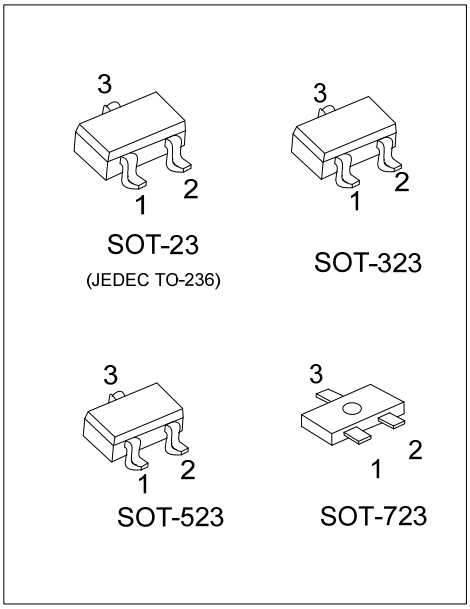
2SA1774

PNP EPITAXIAL SILICON TRANSISTOR

GENERAL PURPOSE TRANSISTOR



■ FEATURES

* Excellent h_{FE} linearity
* Complements the UTC **2SC4617**

■ ORDERING INFORMATION

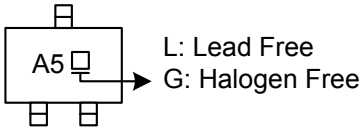
Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
2SA1774L-x-AE3-R	2SA1774G-x-AE3-R	SOT-23	B	E	C	Tape Reel
2SA1774L-x-AL3-R	2SA1774G-x-AL3-R	SOT-323	B	E	C	Tape Reel
2SA1774L-x-AN3-R	2SA1774G-x-AN3-R	SOT-523	B	E	C	Tape Reel
2SA1774L-x-AQ3-R	2SA1774G-x-AQ3-R	SOT-723	B	E	C	Tape Reel

Note: Pin Assignment: B: Base E: Emitter C: Collector

2SA1774G-x-AE3-R
(1)Packing Type
(2)Package Type
(3)Rank
(3)Green Package

(1) R: Tape Reel
(2) AE3: SOT-23, AL3: SOT-323, AN3: SOT-523, AQ3: SOT-723
(3) x: refer to Classification of h_{FE}
(4) G: Halogen Free and Lead Free, L: Lead Free

■ MARKING



■ ABSOLUTE MAXIMUM RATING (T_A=25°C, unless otherwise specified)

PARAMETER		SYMBOL	RATINGS	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	-0.15	A
Collector Power Dissipation	SOT-23	P_C	0.22	W
	SOT-323		0.16	
	SOT-523		0.15	
	SOT-723		0.125	
Junction Temperature		T_J	+150	°C
Storage Temperature		T_{STG}	-55 ~ +150	°C

Notes: 1. Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.
2. The device is guaranteed to meet performance specification within 0°C ~70°C operating temperature range and assured by design from –20°C ~85°C.

■ ELECTRICAL CHARACTERISTICS (T_A=25°C, unless otherwise specified.)

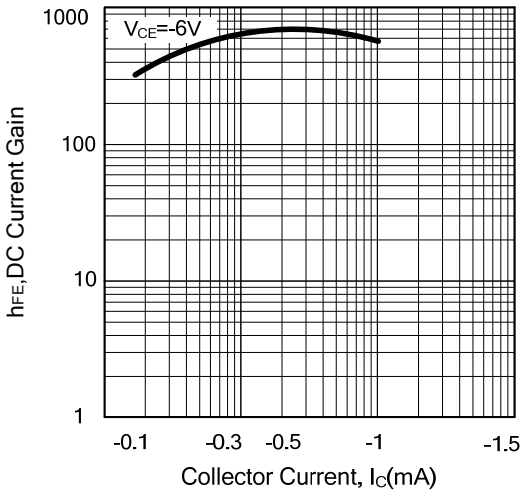
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	BV_{CBO}	I_C = -50μA	-60			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	I_C = -1mA	-50			V
Emitter-Base Breakdown Voltage	BV_{EBO}	I_E = -50μA	-6			V
Collector Cutoff Current	I_{CBO}	V_{CB}= -60V			-0.1	μA
Emitter Cutoff Current	I_{EBO}	V_{EB}= -6V			-0.1	μA
DC Current Transfer Ratio	h_{FE}	V_{CE}= -6V, I_C= -1mA	120		560	
Collector-Emitter Saturation Voltage	$V_{CE\ (SAT)}$	I_C=-50mA, I_B=−5mA			-0.5	V
Transition Frequency	f_T	V_{CE}= -12V, I_E=2mA, f=100MHz		140		MHz
Output Capacitance	C_{OB}	V_{CB}= -12V, I_E=0A, f=1MHz		4.0	5.0	pF

■ CLASSIFICATION OF h_{FE1}

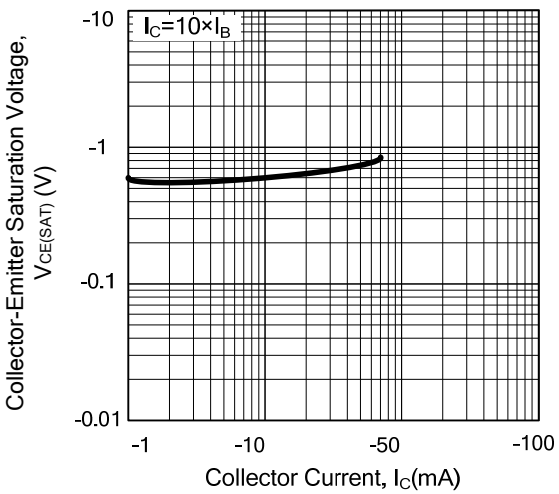
RANK	Q	R	S
Range	120 ~ 270	180 ~ 390	270 ~ 560

■ TYPICAL CHARACTERISTICS

DC Current Gain



Collector-Emitter Saturation Voltage



Collector Power Dissipation vs. Ambient Temperature