



2SC4617B

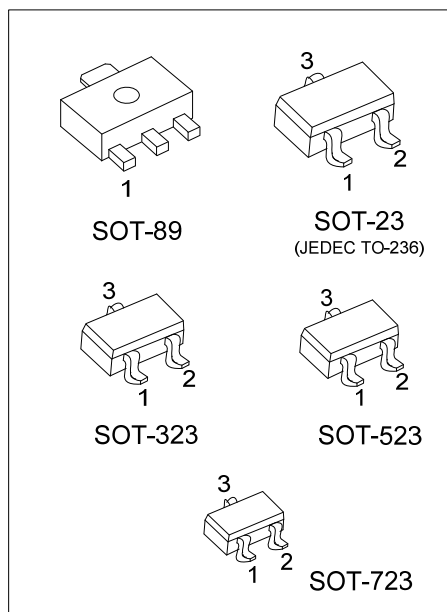
Preliminary

NPN SILICON TRANSISTOR

GENERAL PURPOSE TRANSISTOR

FEATURES

* Complements the UTC 2SA1774



ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
2SC4617BL-x-AB3-R	2SC4617BG-x-AB3-R	SOT-89	B	C	E	Tape Reel
2SC4617BL-x-AE3-R	2SC4617BG-x-AE3-R	SOT-23	B	E	C	Tape Reel
2SC4617BL-x-AL3-R	2SC4617BG-x-AL3-R	SOT-323	B	E	C	Tape Reel
2SC4617BL-x-AN3-R	2SC4617BG-x-AN3-R	SOT-523	B	E	C	Tape Reel
2SC4617BL-x-AQ3-R	2SC4617BG-x-AQ3-R	SOT-723	B	E	C	Tape Reel

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

2SC4617BG-x-AB3-R (1) Packing Type (2) Package Type (3) Rank (4) Green Package	(1) R: Tape Reel (2) AB3: SOT-89, AE3: SOT-23, AL3: SOT-323, AN3: SOT-523, AQ3: SOT-723 (3) Refer to CLASSIFICATION OF h_{FE} (4) G: Halogen Free and Lead Free, L: Lead Free
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MARKING

SOT-89	SOT-23 / SOT-323 / SOT-523 / SOT-723
Date Code L: Lead Free G: Halogen Free	L: Lead Free G: Halogen Free

■ **ABSOLUTE MAXIMUM RATINGS** ($T_A=25^{\circ}\text{C}$, 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}	7	V
Collector Current		I_C	0.15	A
Collector Power Dissipation(Note.2)	SOT-89	P_C	500	mW
	SOT-23/SOT-323		200	mW
	SOT-523		150	mW
	SOT-723		125	mW
Junction Temperature		T_J	+150	$^{\circ}\text{C}$
Storage Temperature		T_{STG}	-55 ~ +150	$^{\circ}\text{C}$

Note: 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.Device mounted on FR-4 substrate Pc board, 2oz copper, with 1inch square copper plate.

■ **ELECTRICAL CHARACTERISTICS** ($T_A=25^{\circ}\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Base Breakdown Voltage	BV_{CBO}	$I_C=50\mu\text{A}, I_E=0$	60			V
Collector Emitter Breakdown Voltage	BV_{CEO}	$I_C=1\text{mA}, I_B=0$	50			V
Emitter-base Breakdown Voltage	BV_{EBO}	$I_E=50\mu\text{A}, I_C=0$	7			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=60\text{V}, I_E=0$			0.1	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=7\text{V}, I_C=0$			0.1	μA
DC Current Gain	h_{FE}	$V_{CE}=6\text{V}, I_C=1\text{mA}$	120		560	
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C=50\text{mA}, I_B=5\text{mA}$			0.6	V
Transition Frequency	f_T	$V_{CE}=12\text{V}, I_C=2\text{mA}, f=100\text{MHz}$		180		MHz

■ **CLASSIFICATION OF h_{FE}**

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

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