



## DTA115T

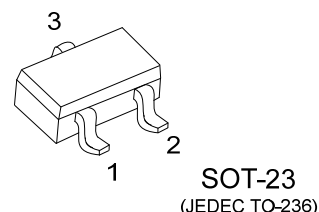
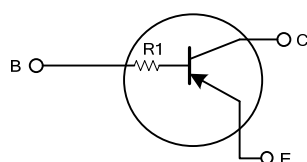
## PNP SILICON TRANSISTOR

### DIGITAL TRANSISTORS (BUILT- IN BIAS RESISTORS)

#### ■ FEATURES

- \* Built-in bias resistors that implies easy ON/OFF applications.
- \* The bias resistors are thin-film resistors with complete isolation to allow positive input.

#### ■ EQUIVALENT CIRCUIT



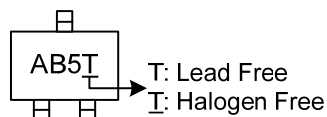
#### ■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
DTA115TL-AE3-R	DTA115TG-AE3-R	SOT-23	B	E	C	Tape Reel

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

DTA115TG-AE3-R	(1)Packing Type (2)Package Type (3)Green Package	(1) R: Tape Reel (2) AE3: SOT-23 (3) G: Halogen Free and Lead Free, L: Lead Free
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#### ■ MARKING



■ ABSOLUTE MAXIMUM RATINGS ( $T_A=25^{\circ}\text{C}$ , unless otherwise specified)

PARAMETER	SYMBOL	RATING	UNIT
Collector-Base Voltage	$V_{CBO}$	-50	V
Collector-Emitter Voltage	$V_{CEO}$	-50	V
Emitter-Base Voltage	$V_{EBO}$	-5	V
Collector Current	$I_C$	-100	mA
Collector Power Dissipation	$P_C$	200	mW
Junction Temperature	$T_J$	+150	$^{\circ}\text{C}$
Storage Temperature	$T_{STG}$	-55 ~ +150	$^{\circ}\text{C}$

Note: 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.

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	$BV_{CBO}$	$I_C=-50\mu\text{A}$	-50			V
Collector-Emitter Breakdown Voltage	$BV_{CEO}$	$I_C=-1\text{mA}$	-50			V
Emitter-Base Breakdown Voltage	$BV_{EBO}$	$I_E=-50\mu\text{A}$	-5			V
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C=-1\text{mA}$ , $I_B=-0.1\text{mA}$			-0.3	V
Collector Cutoff Current	$I_{CBO}$	$V_{CB}=-50\text{V}$			-0.5	$\mu\text{A}$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB}=-4\text{V}$			-0.5	$\mu\text{A}$
DC Current Gain	$h_{FE}$	$V_{CE}=-5\text{V}$ , $I_C=-1\text{mA}$	100	250	600	
Input Resistance	$R_i$		70	100	130	k $\Omega$
Transition Frequency	$f_T$	$V_{CE}=-10\text{V}$ , $I_E=5\text{mA}$ , $f=100\text{MHz}$ (Note)		250		MHz

Note: Transition frequency of the device

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