

DTC114T

NPN SILICON TRANSISTOR

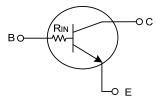
NPN DIGITAL TRANSISTOR (BUILT- IN BIAS RESISTORS)

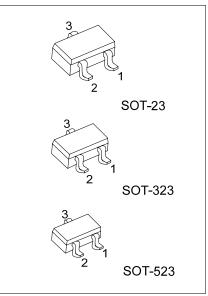
FEATURES

* Built-in bias resistors that implies easy ON/OFF applications.

* The bias resistors are thin-film resistors with complete isolation to allow negative input.

EQUIVALENT CIRCUIT

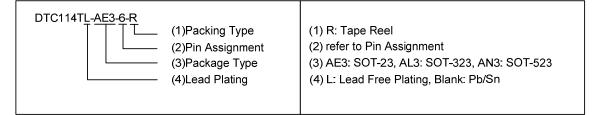




*Pb-free plating product number:DTC114TL

ORDERING INFORMATION

Order Number		Daakaga	Pin Assignment			Dooking	
Normal	Lead Free Plating	Package	1	2	3	Packing	
DTC114T-AE3-6-R	DTC114TL-AE3-6-R	SOT-23	Е	В	С	Tape Reel	
DTD114T-AL3-6-R	DTD114TL-AL3-6-R	SOT-323	Е	В	С	Tape Reel	
DTC114T-AN3-6-R	DTC114TL-AN3-6-R	SOT-523	Е	В	С	Tape Reel	



MARKING



DTC114T

■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

PARAMETER		SYMBOL	RATINGS	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
Calle star Davier Diasir stier	SOT-23/SOT-323		200	mW
Collector Power Dissipation	SOT-523	Pc	150	mW
Junction Temperature		TJ	150	°C
Storage Temperature		T _{STG}	-55 ~ +150	°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.

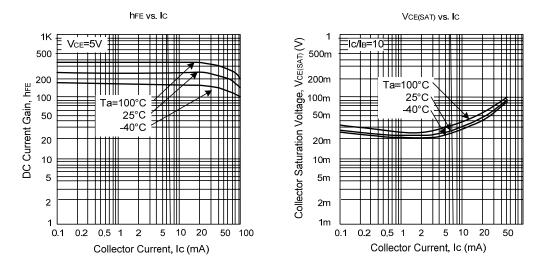
■ ELECTRICAL CHARACTERISTICS (Ta=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	BV _{CBO}	I _C =50μΑ	50			V
Collector-Emitter Breakdown Voltage	BV _{CEO}	I _C =1mA	50			V
Emitter-Base Breakdown Voltage	BV_{EBO}	Ι _Ε =50μΑ	5			V
Collector-Emitter Saturation Voltage	V _{CE(SAT)}	I _C =10mA, I _B =1mA			0.3	V
Collector Cut-off Current	I _{CBO}	V _{CB} =50V			0.5	μA
Emitter Cut-off Current	I _{EBO}	V _{EB} =4V			0.5	μA
DC Current Gain	h _{FE}	V _{CE} =5V, I _C =1mA	100	300	600	
Input Resistance	Rin		7	10	13	kΩ
Current Gain Bandwidth Product	f _T	V _{CE} =10V, I _E =-5mA, f=100MHz		250		MHz



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TYPICAL CHARACTERISTICS



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