



JIANGSU CHANGJIANG ELECTRONICS TECHNOLOGY CO., LTD

SOT-23 Plastic-Encapsulate Transistors

DTC143ZCA

DIGITAL TRANSISTOR(NPN)

SOT-23



FEATURES

Power dissipation

P_D :200 mW($T_{amb}=25^{\circ}C$)

Collector current

I_C :100 mA

ABSOLUTE MAXIMUM RATINGS (perating temperature range applies unless otherwise specified)

Parameter	Symbol	Value	Unit
Input Voltage	V_i	-5~+30	V
Junction Temperature Range	T_j	150	$^{\circ}C$
Storage Temperature Range	T_{STG}	-55~+150	$^{\circ}C$

ELECTRICAL CHARACTERISTICS($T_{amb}=25^{\circ}C$ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	Unit	MAX	UNIT
Input voltage	$V_{I(off)}$	$V_{CC}=5V, I_O=100\mu A$			1.3	V
	$V_{I(on)}$	$V_{CC}=0.3V, I_O=5mA$	0.5			V
Output voltage	$V_{O(on)}$	$I_O=5mA, I_i=0.25mA$			0.3	V
Input current	I_i	$V_i=5V$			1.8	mA
Output current	$I_{O(off)}$	$V_{CC}=50V, V_i=0$			0.5	mA
DC current gain	G_i	$V_O=5V, I_O=10mA$	80			
Input resistance	R_1		3.29	4.7	6.11	K Ω
Resistance ratio	R_2/R_1		8	10	12	
Transition frequency	f_T	$V_{CE}=10V, I_C=5mA, F=100MHz$		250		MHz