

DTC143ZKA
Rev.H Jun.-2025

/ Absolute Maximum Ratings($T_a=25^\circ\text{C}$)

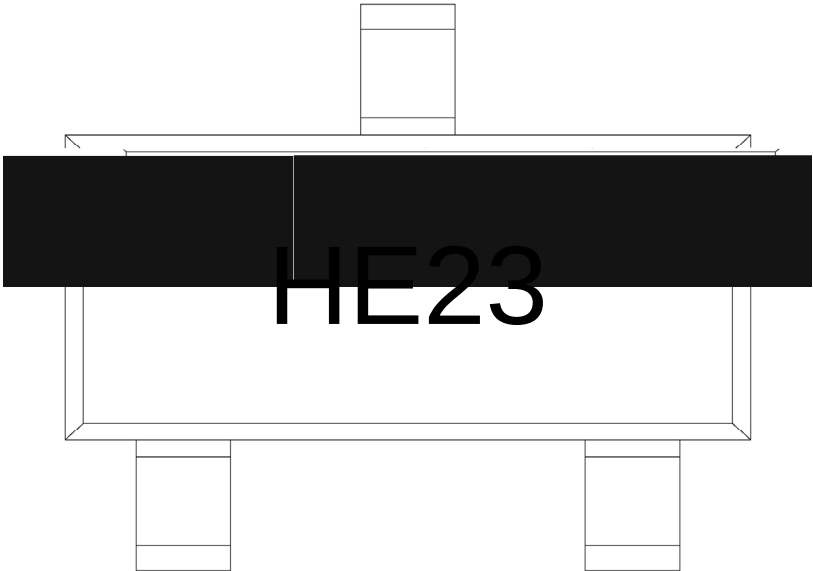
Parameter	Symbol	Rating	Unit
Output Voltage	V_{CC}	50	V
Input Voltage	V_{IN}	30	V
		-5.0	V
Output Current	I_O	100	mA
Power Dissipation	P_C	200	mW
Junction Temperature	T_j	150	
Storage Temperature Range	T_{stg}	-55 150	

/ Electrical Characteristics($T_a=25^\circ\text{C}$)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Input Voltage(OFF)	$V_{I(off)}$	$V_{CC}=5.0V$ $I_O=100\mu A$	0.5			V
Input Voltage(ON)	$V_{I(on)}$	$V_O=0.3V$ $I_O=5.0mA$			1.3	V
Output Voltage	$V_{O(on)}$	$I_O=5.0mA$ $I_I=0.25mA$		0.1	0.3	V
Input Current	I_I	$V_I=5.0V$			1.8	mA
Output Cut-off Current	$I_{O(off)}$	$V_{CC}=50V$ $V_I=0V$			0.5	μA
DC Current Gain	G_I	$V_O=5.0V$ $I_O=10mA$	80			
Transition Frequency	f_T	$V_{CE}=10V$ $I_E=-5.0mA$ $f=100MHz$		250		MHz
Resistance1	R_1		3.29	4.7	6.11	K Ω
Resistance Ratio	R_2/R_1		8.0	10	12	

DTC1 6.38 T0m0g.0ZKA

/ Marking Instructions



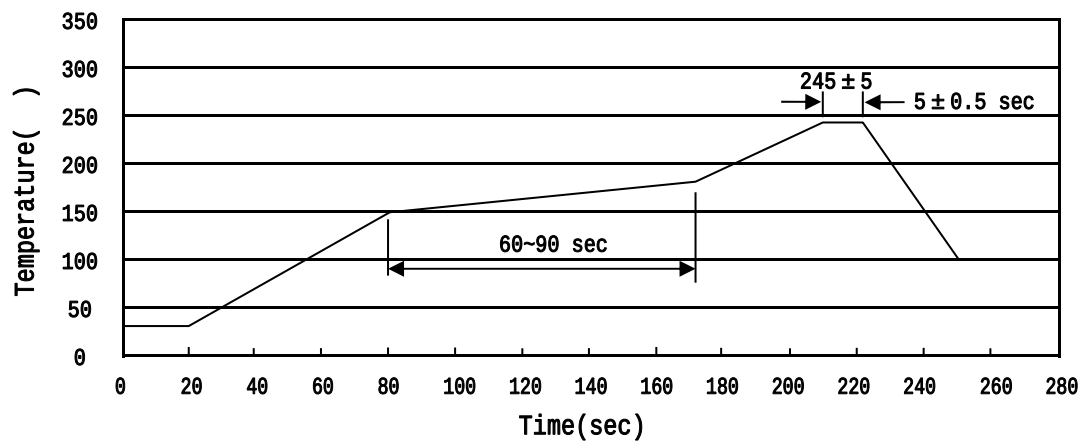
⌒

K	N
E23	N

Note:

K	Company Code
E23	Product Type Code

() / Temperature Profile for IR Reflow Soldering(Pb-Free)



- Note:
1. Preheating: 150~180 °C, Time: 60~90sec.
 2. Peak Temp.: 245 ± 5 °C, Duration: 5 ± 0.5sec.
 3. Cooling Speed: 2~10 °C/sec.

/ Resistance to Soldering Heat Test Conditions

260 ± 5 °C, Time: 10 ± 1 sec.

/ Packaging SPEC.

REEL

Package Type	Units					Dimension (unit mm ³)		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
SOT-23	3,000	10	30,000	6	180,000	7 × 8	180 × 120 × 180	390 × 385 × 205

/ Notices