

DTC143TKA

Rev.G Feb.-2022



DATA SHEET

H

Silicon NPN Digital transistor in a

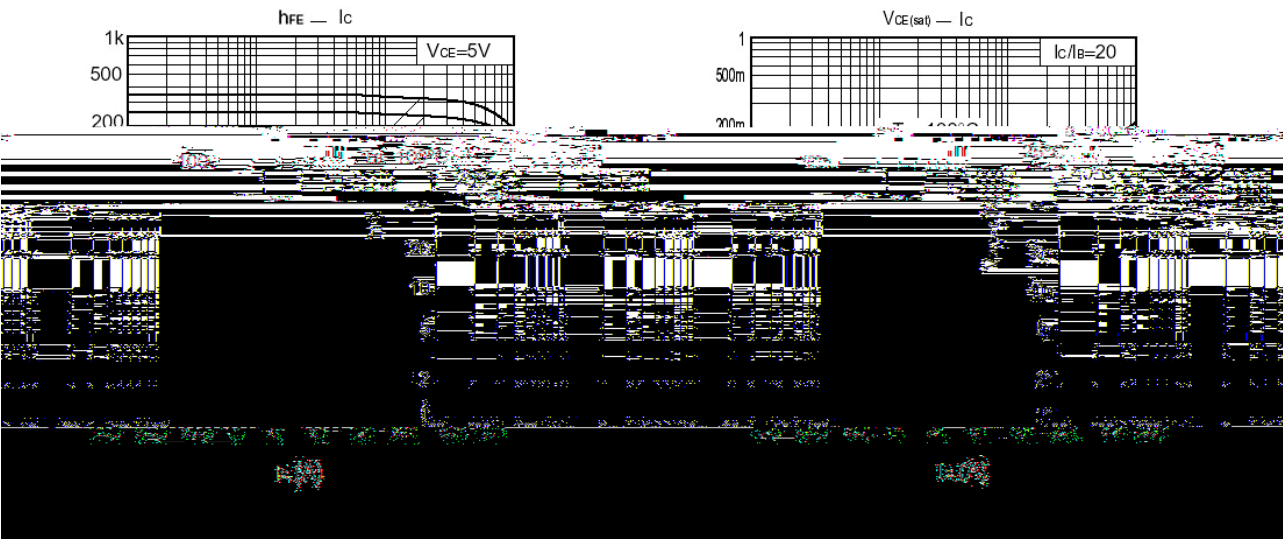
/ Absolute Maximum Ratings(Ta=25)

④ Parameter	Z. Symbol	f Rating	% Unit
Collector-Base Voltage	V_{CBO}	50	V
Collector-Emitter Voltage	V_{CEO}	50	V
Emitter-Base Voltage	V_{EBO}	5.0	V
Collector Current	I_C	100	mA
Power Dissipation	P_C	200	mW
Junction Temperature	T_j	150	-
Storage Temperature Range	T_{stg}	-55~150	-

/ Electrical Characteristics(Ta=25)

④ Parameter	Z. Symbol	④ Test Conditions	④ Min	④ Typ	④ Max	% Unit
Collector-Base Voltage	V_{CBO}	$I_C =$	50			V
Collector-Emitter Voltage	V_{CEO}	$I_C = 1.0mA$	50			V
Emitter-Base Voltage	V_{EBO}	I_E	5.0			V
Collector Cut-off Current	I_{CBO}	$V_{CB} = 50V$			0.5	
Emitter Cut-off Current	I_{EBO}	$V_{EB} = 4.0V$			0.5	
DC Current Gain	h_{FE}	$V_{CE} = 5.0V$ $I_C = 1.0mA$	100	250	600	
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C = 5.0mA$ $I_B = 0.25mA$			0.3	V
Transition Frequency	f_T	$V_{CE} = 10V$ $I_C = 5.0mA$ $f_T = 100MHz$		250		MHz
Resistance1	R1		3.29	4.7	6.11	

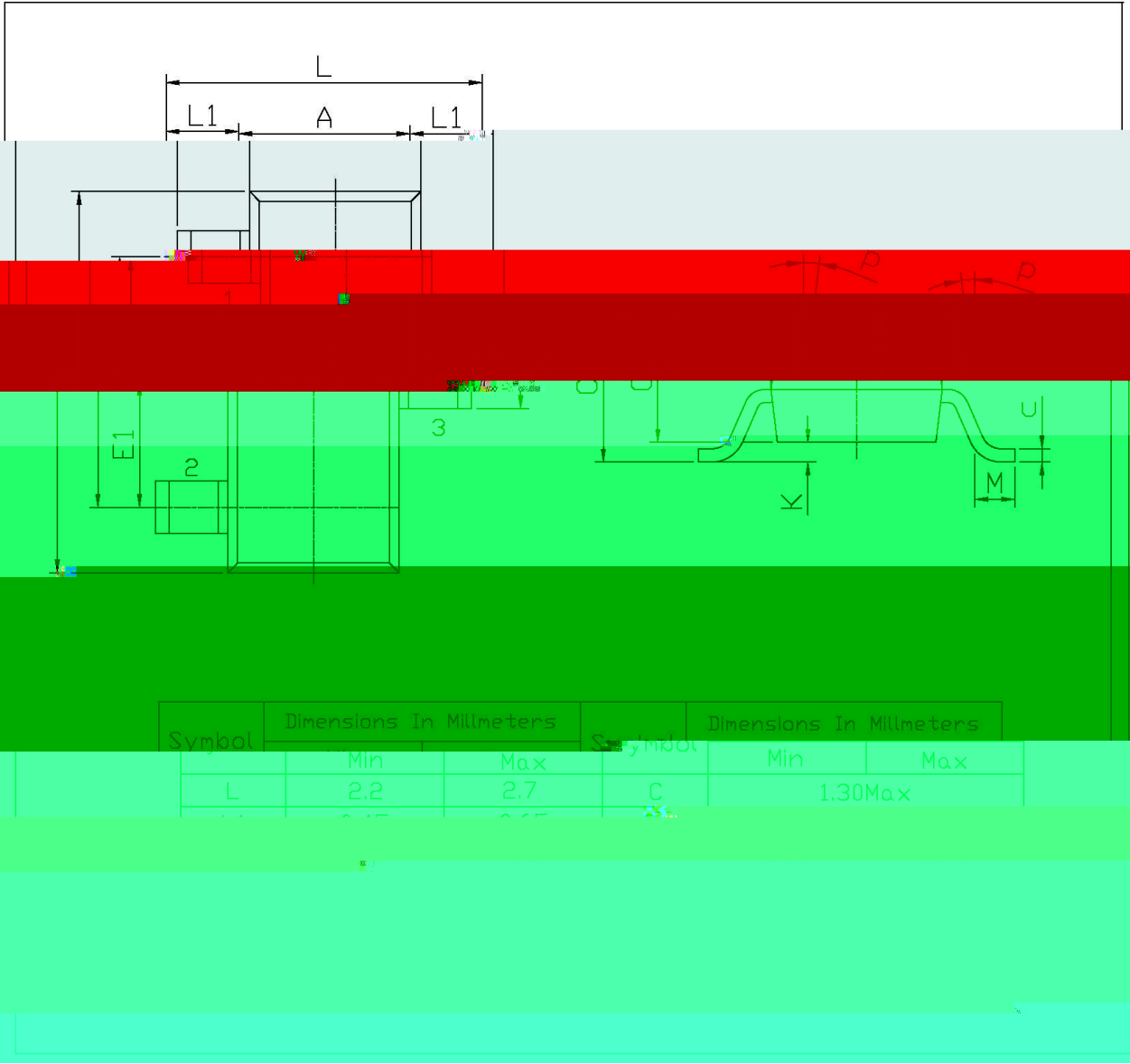
/ Electrical Characteristic Curve



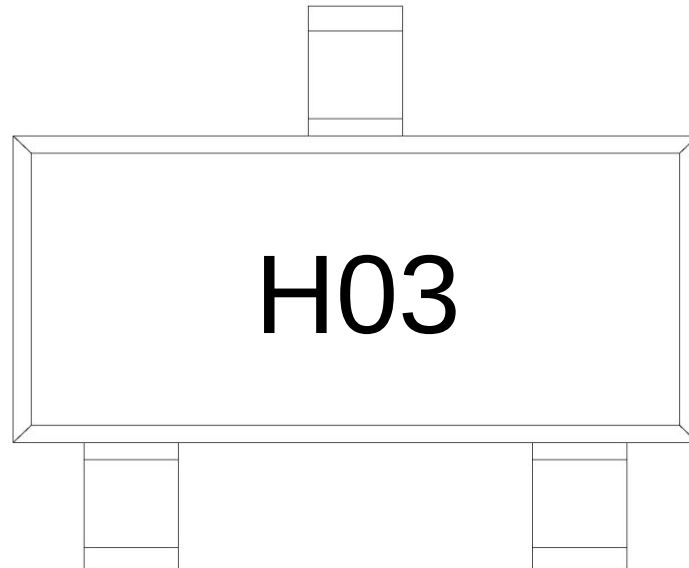
/ Package Dimensions

SOT-23

单位：mm



/ Marking Instructions



03y

Note:

Company Code

03y

Product Type

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



Note:
1.Preheating:25~150- , Time:60~90sec.
2.Peak Temp.:245r 5- , Duration:5r 0.5sec.
3. Cooling Speed: 2~10- /sec.

/ Resistance to Soldering Heat Test Conditions

260r 5- 10r 1 sec. Temp.:260±5- Time:10±1 sec

/ Packaging SPEC.

2& x / REEL

Package Type	Units					Dimension (unit mm³)		
						"		

/ Notices