

FrelTec

Mathildenstr. 10A
82319 Starnberg
Germany

Transistor Diode
SOT523

SOT523

SPECIFICATION

671	DTA123EExx	ST53	E03
Type	Type	Package	Packing
671: Transistor Diode	DTA123EE	SOT523	E03: Embossed tape and reel for 3k pc (7'REEL)

All products according to RoHS (2015/863/EU)

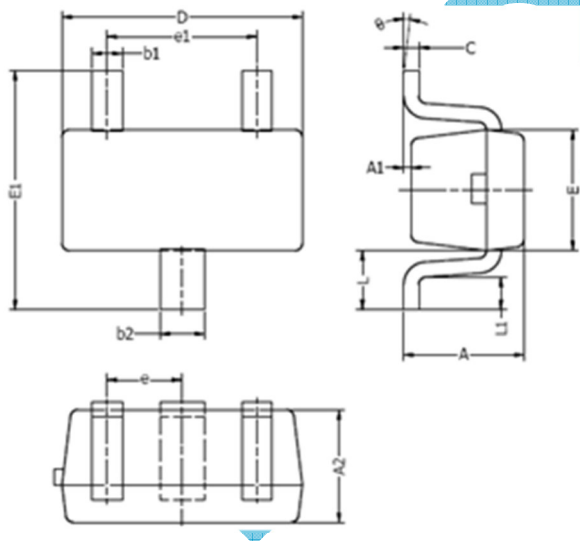
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DTA123EE

PACKAGE OUTLINE



DIM	MILLIMETERS		INCHES	
	MIN	MAX	MIN	MAX
A	0.70	0.90	0.028	0.035
A1	0.00	0.10	0.000	0.004
A2	0.70	0.80	0.028	0.031
b1	0.15	0.25	0.006	0.010
b2	0.25	0.35	0.010	0.014
c	0.10	0.20	0.004	0.008
D	1.50	1.70	0.059	0.067
E	0.70	0.90	0.028	0.035
E1	1.45	1.75	0.057	0.069
e	0.50 TYP.		0.020 TYP.	
e1	0.90	1.10	0.035	0.043
L	0.40 REF.		0.016 REF.	
L1	0.10	0.30	0.004	0.012
θ	0°	8°	0°	8°

2/3/2022

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Absolute Maximum Ratings TA = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
V _{CC}	Supply Voltage	-50	V
V _{IN}	Input Voltage	-12 ~ +10	V
I _O	Output Current	-100	mA
I _{CM}	Peak Collector Current	-100	mA
P _D	Power Dissipation	150	mW
T _J	Junction to Ambient	150	°C
T _{STG}	Storage Temperature Range	-55 to +150	°C

These ratings are limiting values above which the serviceability of the device may be impaired

Electrical Characteristics (TA = 25°C unless otherwise noted)

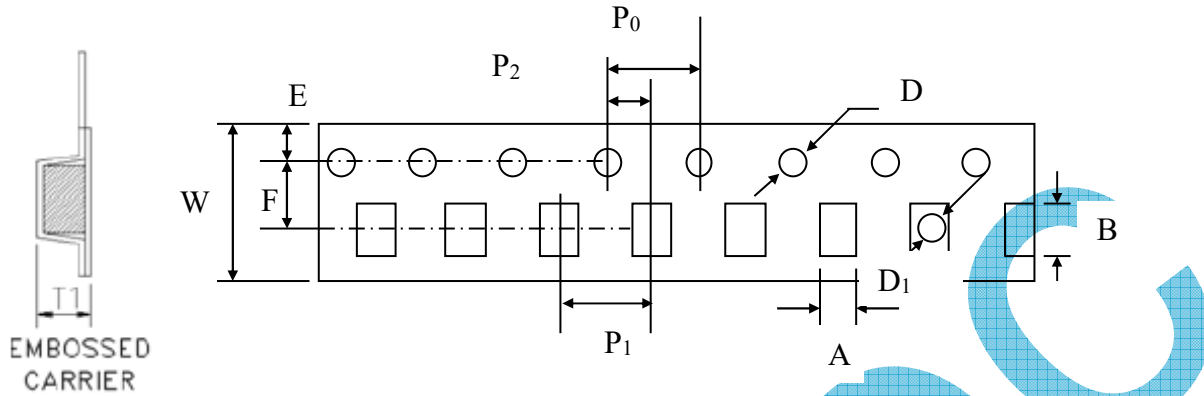
Parameter	Symbol	Test Condition	Limits			Unit
			Min	Type	Max	
Input Voltage	V _{I(off)}	V _{CC} =-5V, I _O =-100uA	-0,5			V
	V _{I(on)}	V _O =-0,3V, I _O =-10mA			-3	V
Output Voltage	V _{O(on)}	I _O /I _I =-10mA/-0,5mA		-0,1	-0,3	V
Input Current	I _I	V _I =-5V			-3,8	mA
Output Current	I _{O(off)}	V _{CC} =-50V, V _I =0V			-0,5	uA
DC Current Gain	G _I	V _O =-10V, I _O =-5mA	80	15		
Input Resistance	R ₁		1,54	2,2	2,86	KΩ
Resistance Ratio	R ₂ /R ₁		0,8	1	1,2	
Transition Frequency	f _T	V _{CE} =-10V, I _E =-5mA, f=100MHz		250		MHz

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SPECIFICATION

Tape And Reel Package

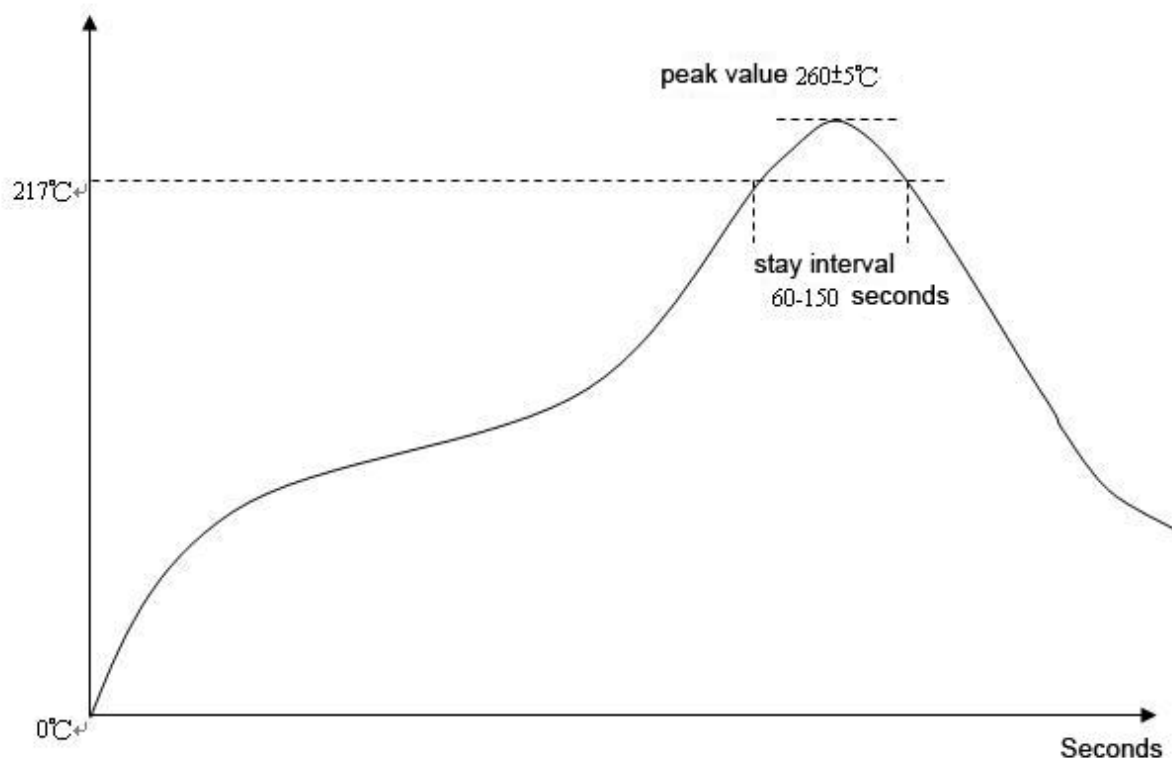


Type	A	B	W	E	F	P ₀	P ₁	P ₂	ΦD	ΦD ₁	T1
	1,73 ±0,1	1,85 ±0,1	8 ±0,30	1,75±0,01	3,5 ±0,05	4,00±0,10	4,00±0,10	2,00±0,05	1,55±0,03	0,4 ±0,5	1 ±0,1

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Lead Free Reflow Soldering Profile

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Stock period

The performance of these products, including the solderability, is guaranteed for 12 month, provided that they remain packed as they were when delivered and stored at a temperature of $25^{\circ}\text{C} \pm 3^{\circ}\text{C}$ and a relative humidity less than 80%RH

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