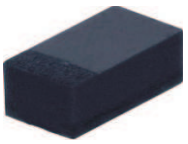
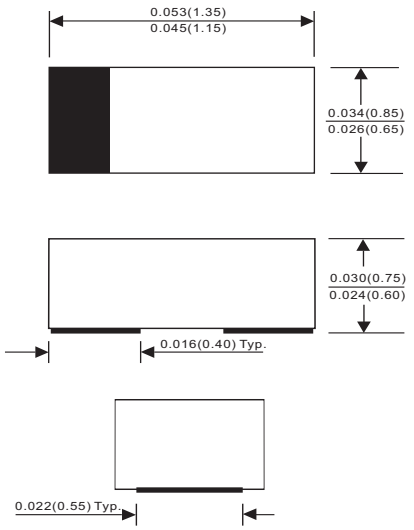
CDBER42/43

Io = 200 mA
VR = 30 Volts
RoHS Device



0503/SOD-723F



Dimensions in inches and (millimeter)

Features

-Low forward voltage.

-Designed for mounting on small surface.

-Extremely thin/leadless package.

-Majority carrier conduction.

Mechanical data

-Case: 0503/SOD-723F standard package, molded plastic.

-Terminals: Gold plated, solderable per MIL-STD-750,method 2026.

-Polarity: Indicated by cathode band.

-Mounting position: Any

-Weight: 0.002 gram(approx.).

Maximum Rating (at TA=25°C unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Peak reverse voltage		V_{RM}			30	V
Reverse voltage		V_R			30	V
RMS reverse voltage		$V_{R(RMS)}$			21	V
Average forward rectified current		I_O			200	mA
Repetitive peak forward current		I_{FRM}			0.5	A
Forward current,surge peak	8.3 ms single half sine-wave superimposed on rate load(JEDEC method)	I_{FSM}			4	A
Power dissipation		P_D			150	mW
Thermal resistance junction to ambient air		$R_{\theta JA}$			667	°C/W
Storage temperature		T_{STG}	-55		+125	°C
Junction temperature		T_j			+125	°C

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

Parameter		Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	CDBER42/43	I_F = 200mA	V_F			1	V
	CDBER42	I_F = 10mA				0.4	
	CDBER42	I_F = 50mA				0.65	
	CDBER43	I_F = 2mA				0.33	
	CDBER43	I_F = 15mA				0.45	
Reverse current		V_R = 25V	I_R			0.5	uA
Capacitance between terminals		f = 1 MHz, and 1 VDC reverse voltage	C_T			10	pF
Reverse recovery time		I_F=I_R=10mA,Irr=0.1xIR,RL=100 ohm	T_{rr}			5	nS

RATING AND CHARACTERISTIC CURVES (CDBER42/43)

Fig. 1 - Forward characteristics

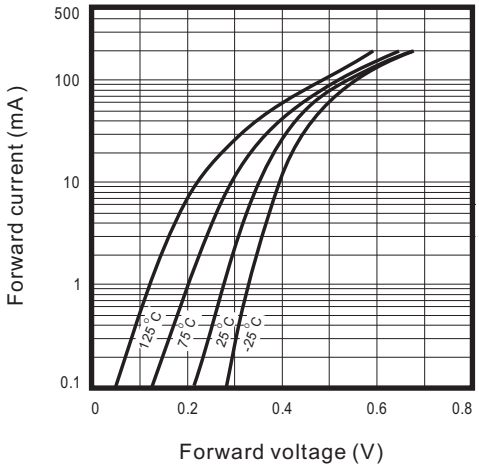


Fig. 2 - Reverse characteristics

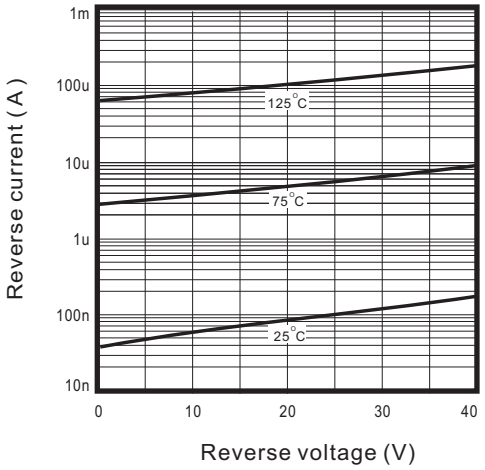


Fig.3 - Capacitance between terminals characteristics

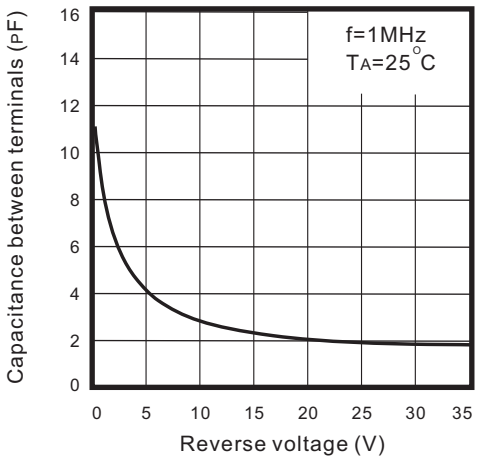
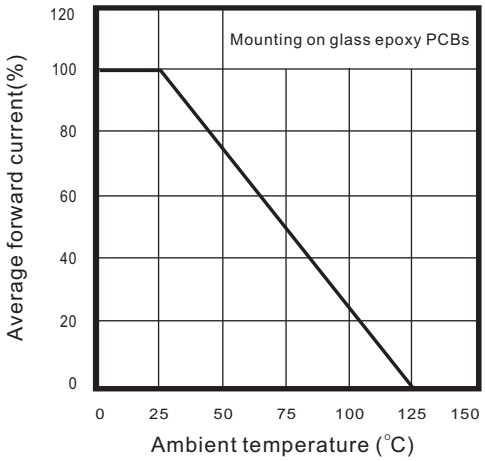
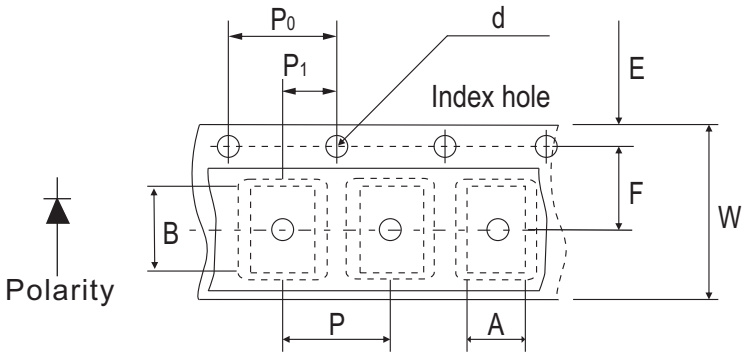
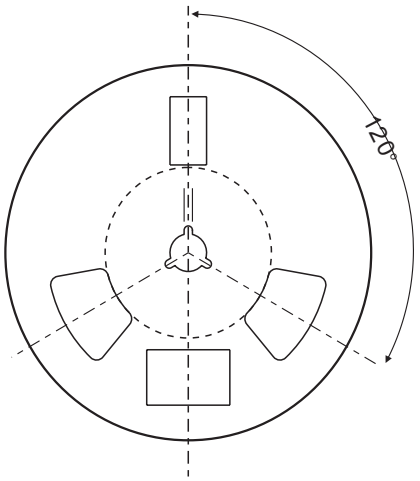


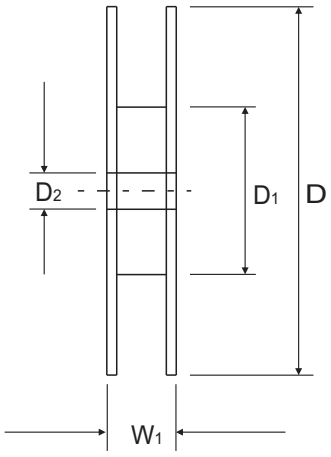
Fig.4 - Current derating curve

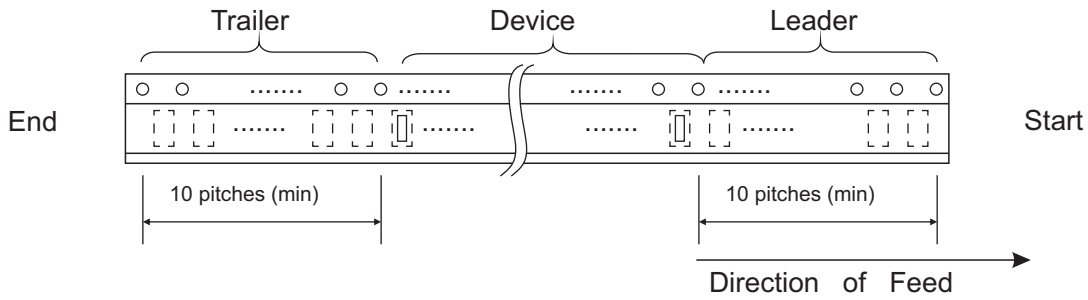


Reel Taping Specification









0503 (SOD-723F)	SYMBOL	A	B	C	d	D	D_1	D_2
	(mm)	0.90±0.10	1.46±0.10	0.80±0.10	1.55±0.05	178±1	60.0 MIN.	13.0±0.20
	(inch)	0.035±0.004	0.057±0.004	0.031±0.004	0.061±0.002	7.008±0.04	2.362 MIN.	0.512±0.008

0503 (SOD-723F)	SYMBOL	E	F	P	P_0	P_1	T	W	W_1
	(mm)	1.75±0.10	3.50±0.05	4.00±0.10	4.00±0.10	2.00±0.10	0.22±0.05	8.00±0.20	13.5 MAX.
	(inch)	0.069±0.004	0.138±0.002	0.157±0.004	0.157±0.004	0.079±0.004	0.008±0.002	0.315±0.008	0.531 MAX.

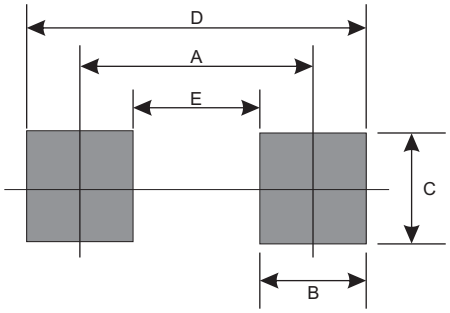
Marking Code

Part Number	Marking Code
CDBER42	BD
CDBER43	BE

xx = Product type marking code

Suggested PAD Layout

SIZE	0503/SOD-723F	
	(mm)	(inch)
A	0.85	0.033
B	0.55	0.022
C	0.85	0.033
D	1.40	0.055
E	0.30	0.012



Standard Package

Case Type	Qty per Reel	Reel Size
	(Pcs)	(inch)
0503/SOD-723F	4000	7