

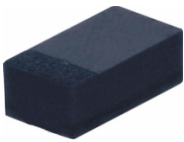
CDBER42-HF

Io = 200 mA

VR = 30 Volts

RoHS Device

Halogen Free



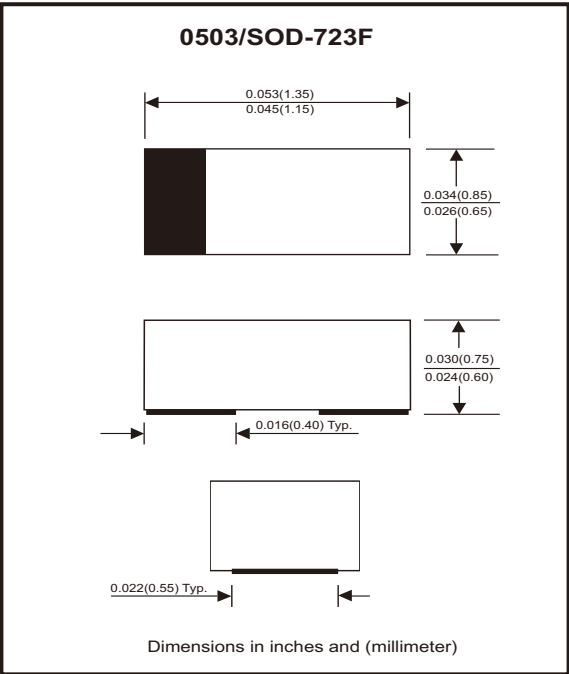
Features

- Low forward voltage.
- Designed for mounting on small surface.
- Extremely thin/leadless package.
- Majority carrier conduction.

Mechanical data

- Case: 0503(1308) standard package, molded plastic.
- Terminals: Gold plated, solderable per MIL-STD-750,method 2026.
- Mounting position: Any
- Weight: 0.002 grams (approx.).

Circuit Diagram



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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Peak reverse voltage		VRM			30	V
Reverse voltage		VR			30	V
RMS reverse voltage		VR(RMS)			21	V
Average forward rectified current		Io			200	mA
Repetitive peak forward current		IFRM			0.5	A
Forward current,surge peak	8.3 ms single half sine-wave superimposed on rate load(JEDEC method)	IFSM			4	A
Power dissipation		PD			150	mW
Thermal resistance junction to ambient air		R θJA			667	°C/W
Storage temperature		TSTG	-55		+125	°C
Junction temperature		Tj			+125	°C

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	IF = 200mA IF = 10mA IF = 50mA	VF			1 0.4 0.65	V
Reverse current	VR = 25V	IR			0.5	μA
Capacitance between terminals	f = 1 MHz, and 1 VDC reverse voltage	CT			10	pF
Reverse recovery time	IF=IR=10mA,Irr=0.1xIR,RL=100 ohm	Trr			5	nS

Rating and Characteristic Curves (CDBER42-HF)

Fig. 1 - Forward characteristics

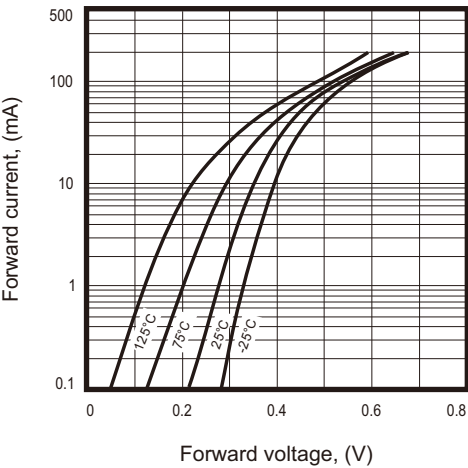


Fig. 2 - Reverse characteristics

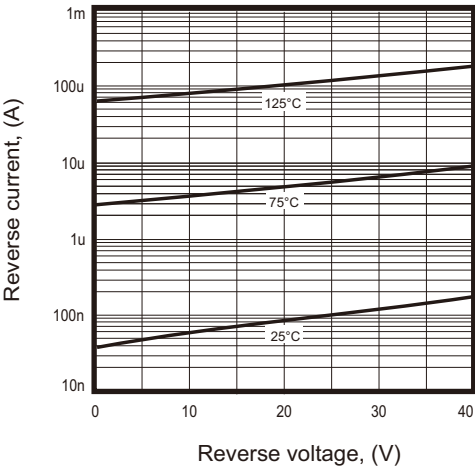


Fig.3 - Capacitance between terminals characteristics

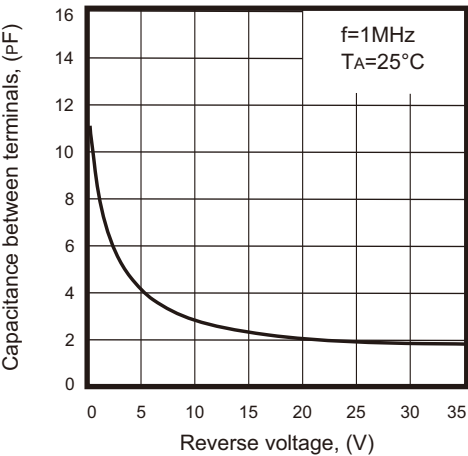
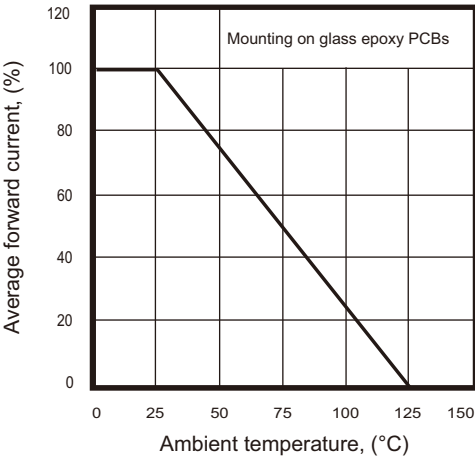
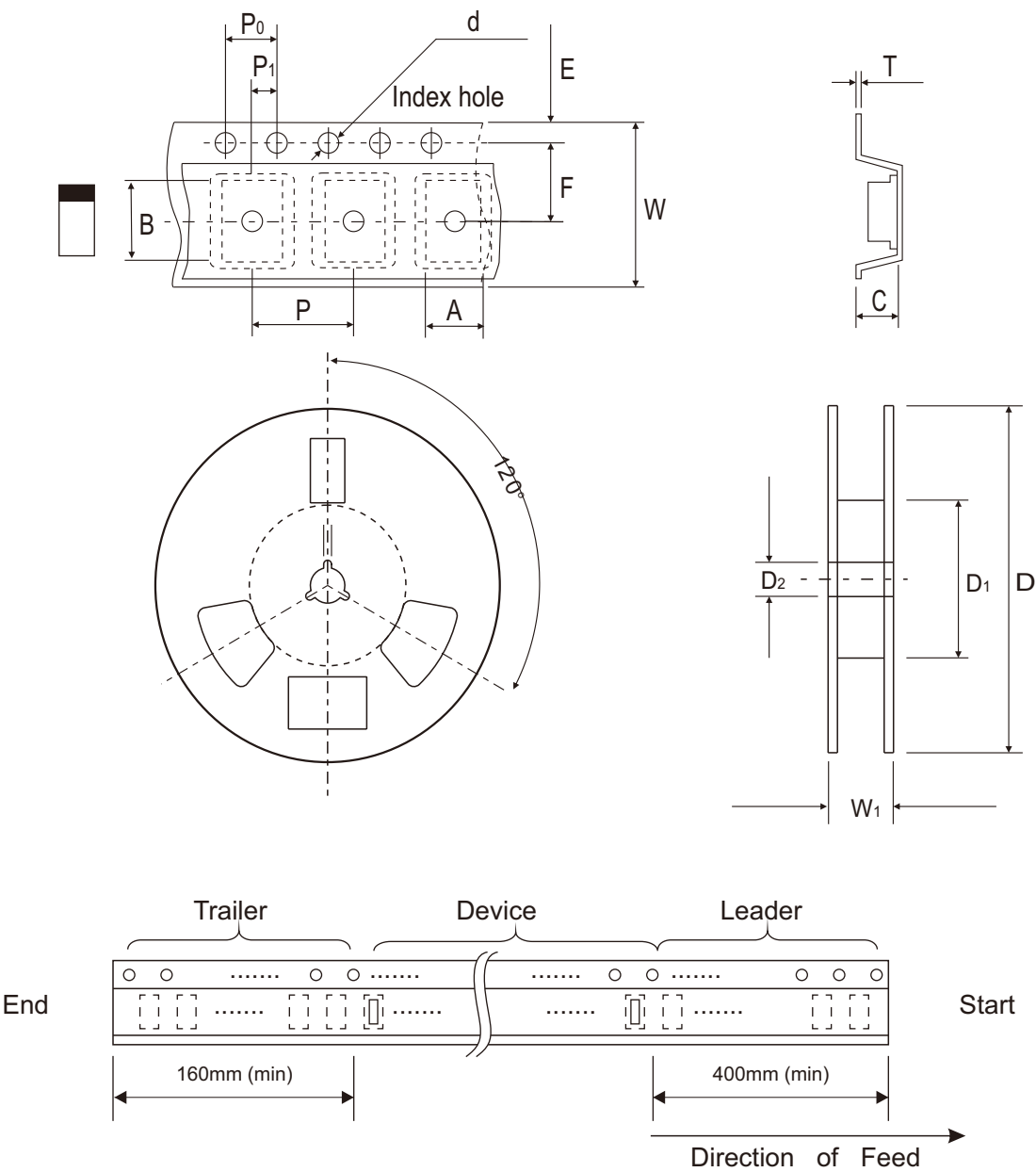


Fig.4 - Current derating curve



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

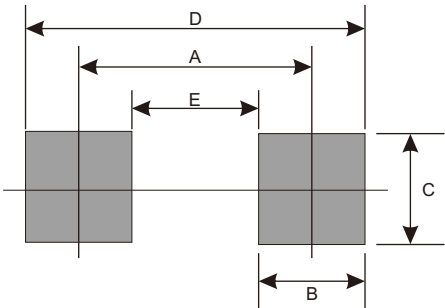
Part Number	Marking Code
CDBER42-HF	BD



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	REEL PACK	
	REEL (pcs)	Reel Size (inch)
0503/SOD-723F	4,000	7