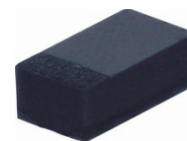


CDBUR40

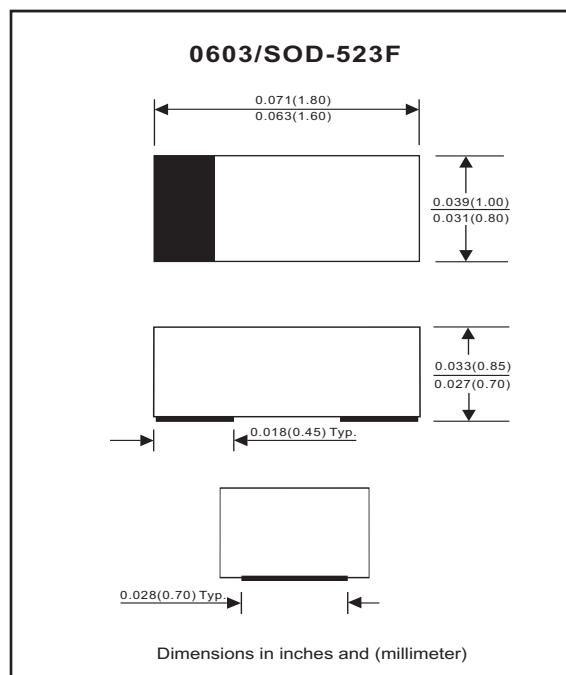
I_o = 200 mA**V_R = 40 Volts****RoHS Device**

Features

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

Mechanical data

- Case: 0603/SOD-523F standard package, molded plastic.
- Terminals: Gold plated, solderable per MIL-STD-750, method 2026.
- Polarity: Indicated by cathode band.
- Marking code: BC
- Mounting position: Any
- Weight: 0.003 gram(approx.).



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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Peak reverse voltage		V _{RM}			40	V
Reverse voltage		V _R			40	V
RMS reverse voltage		V _{R(RMS)}			28	V
Average forward rectified current		I _O			200	mA
Forward current,surge peak	8.3 ms single half sine-wave superimposed on rate load(JEDEC method)	I _{FSM}			0.6	A
Power dissipation		P _D			150	mW
Storage temperature		T _{STG}	-65		+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	I _F = 1mA I _F = 40mA	V _F			0.38 1	V
Reverse current	V _R = 30V	I _R			0.2	uA
Capacitance between terminals	f = 1 MHz, and 0 VDC reverse voltage	C _T			5	pF
Reverse recovery time	I _F =I _R =10mA,I _{rr} =0.1xI _R ,R _L =100 ohm	T _{rr}			5	nS

RATING AND CHARACTERISTIC CURVES (CDBUR40)

Fig. 1 - Forward characteristics

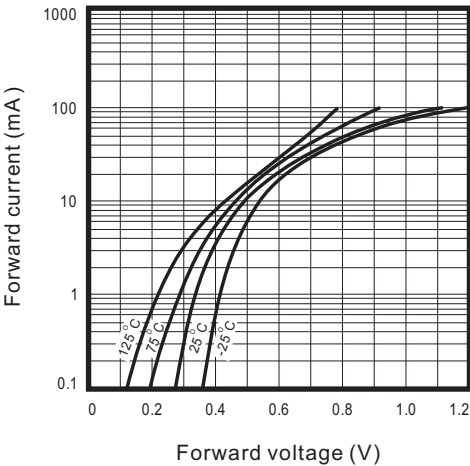


Fig. 2 - Reverse characteristics

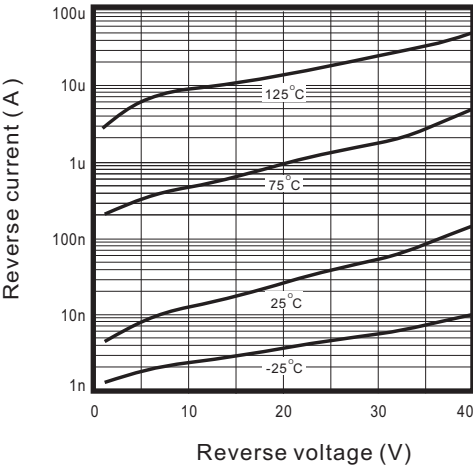


Fig.3 - Capacitance between terminals characteristics

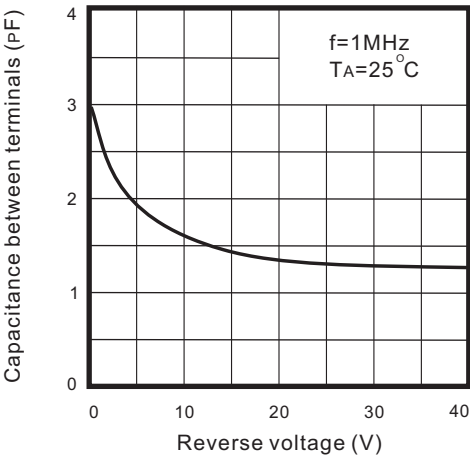
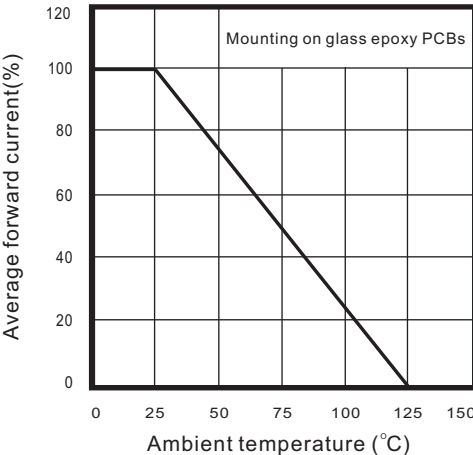
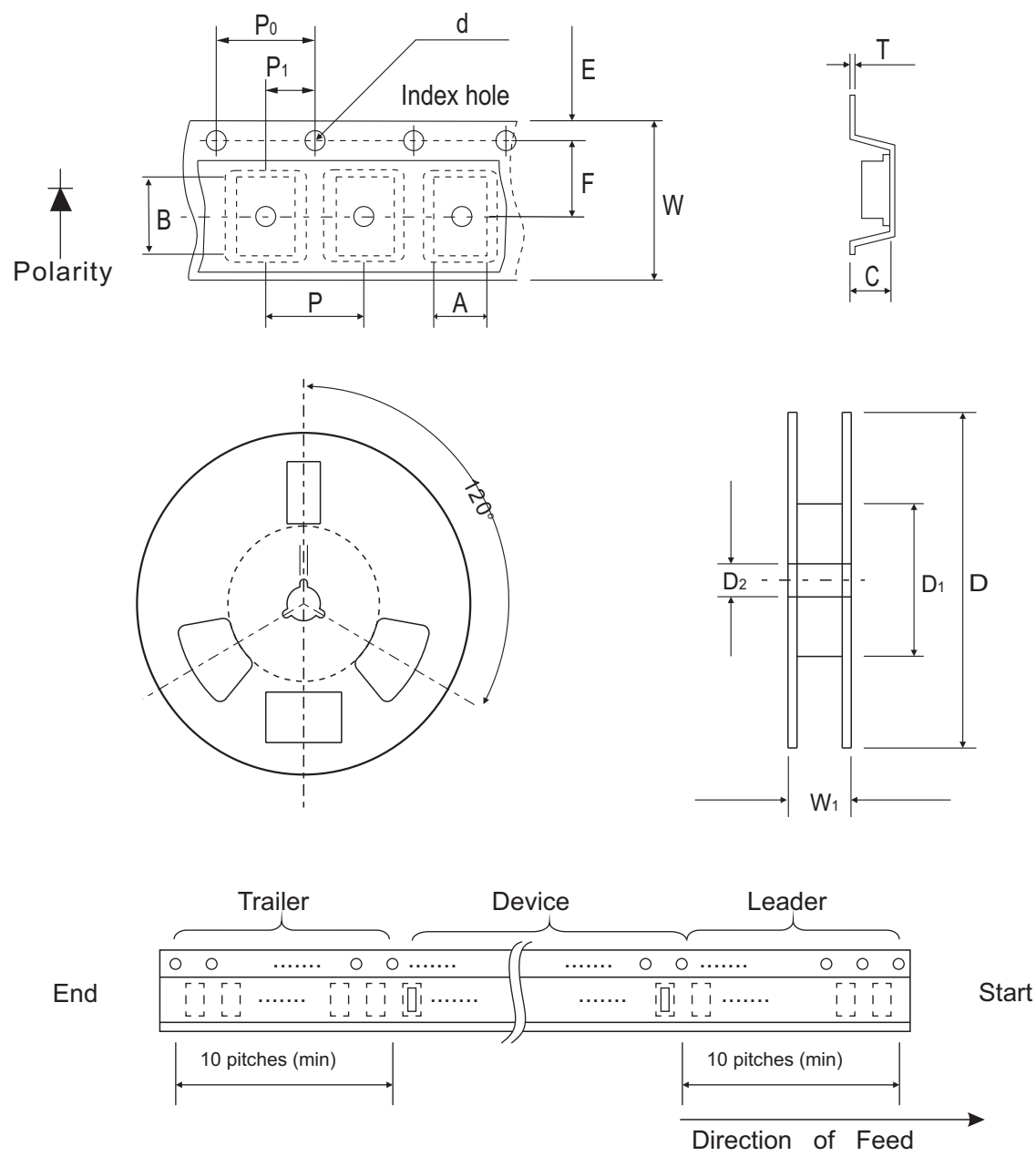


Fig.4 - Current derating curve



Reel Taping Specification



0603 (SOD-523F)	SYMBOL	A	B	C	d	D	D ₁	D ₂
	(mm)	1.00 ± 0.10	1.85 ± 0.10	1.00 ± 0.10	1.55 ± 0.05	178 ± 1	60.0 MIN.	13.0 ± 0.20
	(inch)	0.039 ± 0.004	0.073 ± 0.004	0.039 ± 0.004	0.061 ± 0.002	7.008 ± 0.04	2.362 MIN.	0.512 ± 0.008

0603 (SOD-523F)	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 ± 0.05	0.23 ± 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	0.009 ± 0.002	0.315 ± 0.008	0.531 MAX.

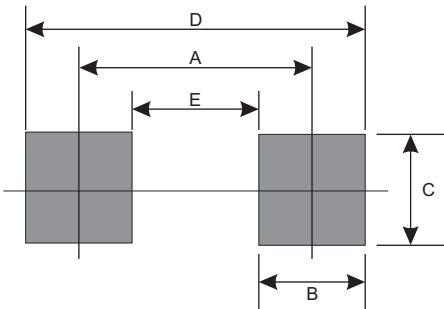
Marking Code

Part Number	Marking Code
CDBUR40	BC



Suggested PAD Layout

SIZE	0603/SOD-523F	
	(mm)	(inch)
A	1.25	0.049
B	0.60	0.024
C	1.00	0.039
D	1.85	0.073
E	0.65	0.026



Standard Package

Case Type	Qty per Reel	Reel Size
	(Pcs)	(inch)
0603/SOD-523F	4000	7