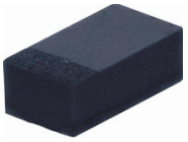
SMD Schottky Barrier Diode

CDBUR40-HF

Io = 200 mA
VR = 40 Volts
RoHS Device
Halogen Free



Features

-Low forward voltage.

-Designed for mounting on small surface.

-Extremely thin / leadless package.

-Majority carrier conduction.

Mechanical data

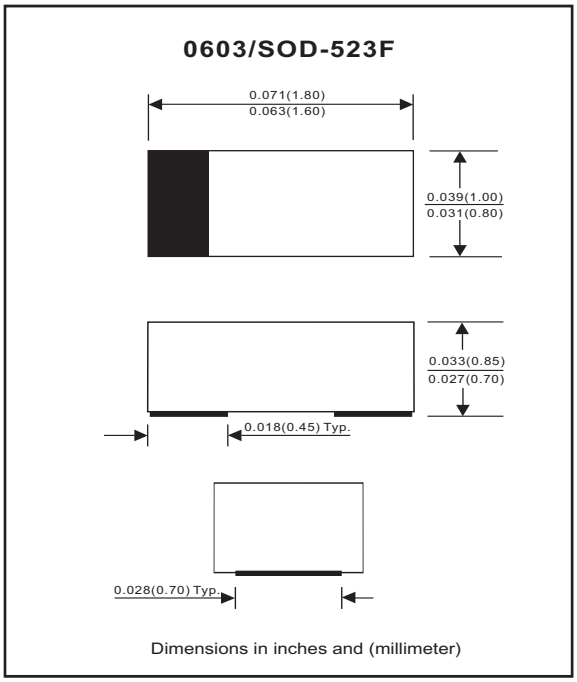
-Case: 0603/SOD-523F standard package, molded plastic.

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

-Marking code: cathode band & 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		VRM			40	V
Reverse voltage		VR			40	V
RMS reverse voltage		VR(RMS)			28	V
Average forward rectified current		IO			200	mA
Forward current,surge peak	8.3 ms single half sine-wave superimposed on rate load(JEDEC method)	IFSM			0.6	A
Power dissipation		PD			150	mW
Storage temperature		TSTG	-65		+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 = 1mA IF = 40mA	VF			0.38 1	V
Reverse current	VR = 30V	IR			0.2	uA
Capacitance between terminals	f = 1 MHz, and 0 VDC reverse voltage	CT			5	pF
Reverse recovery time	IF=IR=10mA,Irr=0.1xIR,RL=100 ohm	Trr			5	nS

RATING AND CHARACTERISTIC CURVES (CDBUR40-HF)

Fig. 1 - Forward characteristics

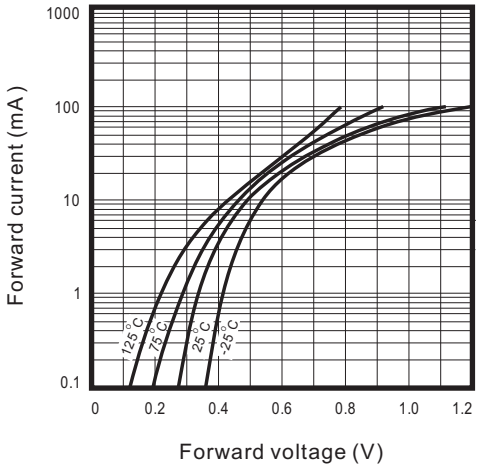


Fig. 2 - Reverse characteristics

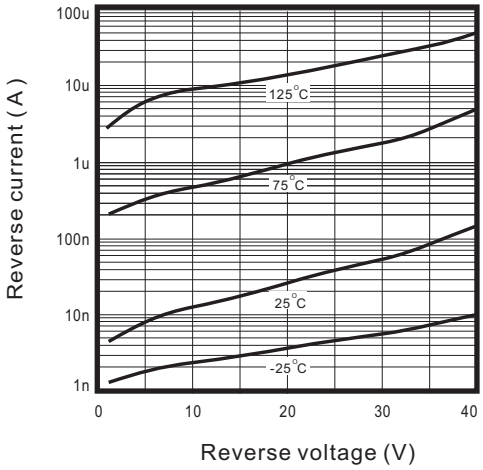


Fig.3 - Capacitance between terminals characteristics

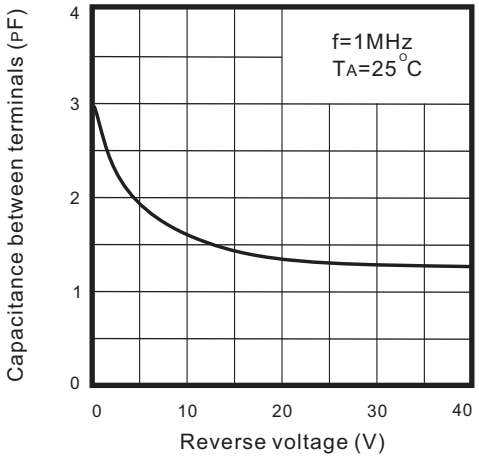
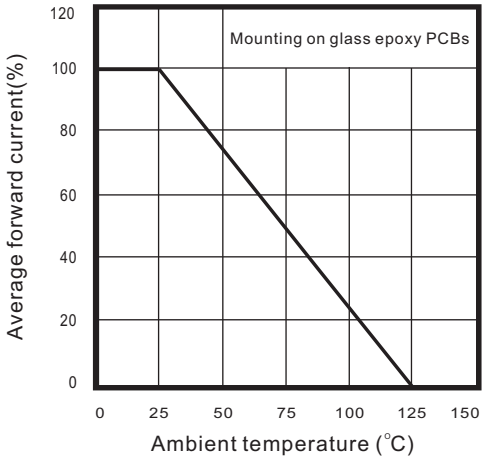
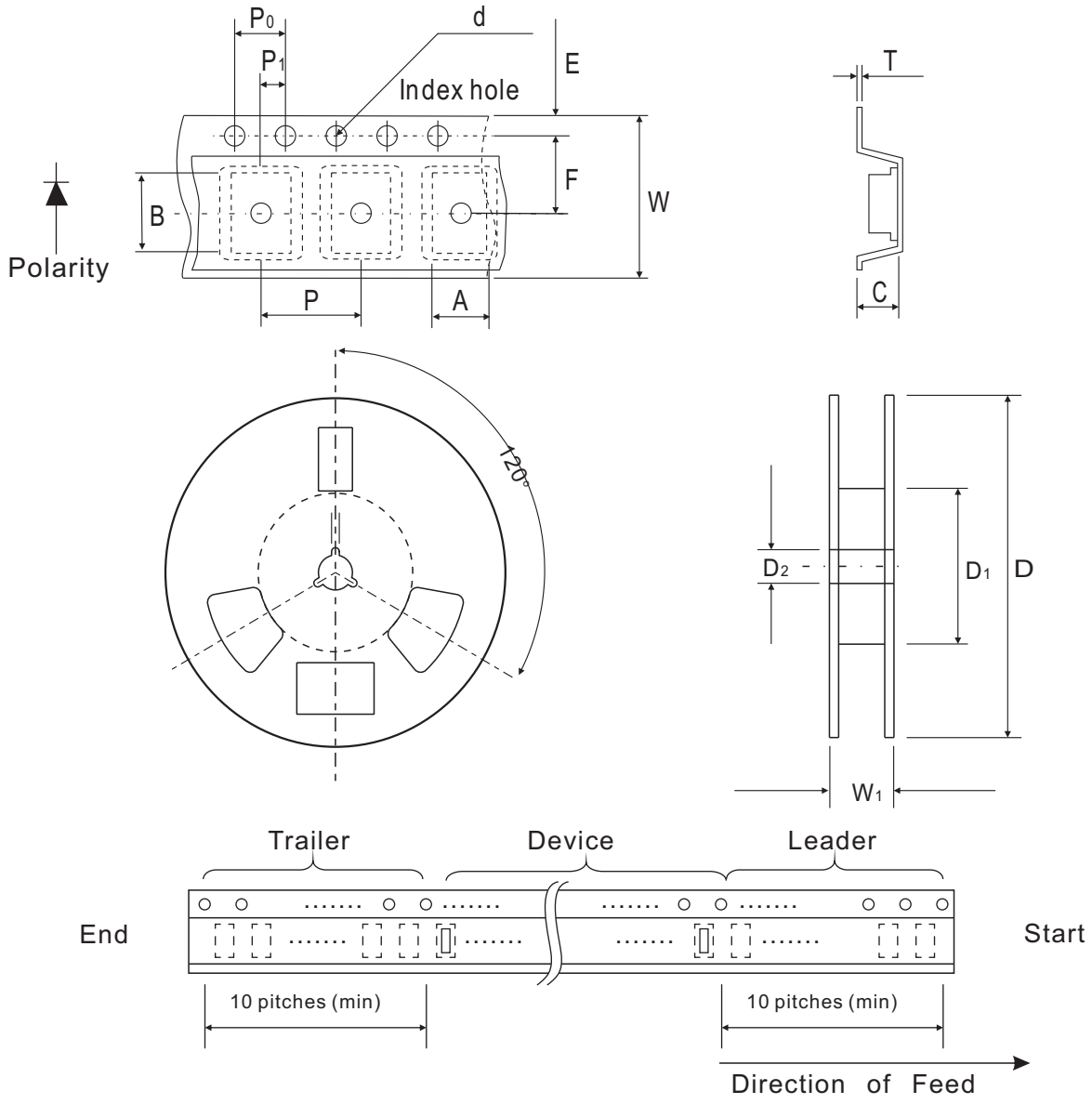


Fig.4 - Current derating curve



Reel Taping Specification



	SYMBOL	A	B	C	d	D	D_1	D_2
0603 (SOD-523F)	(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

	SYMBOL	E	F	P	P_0	P_1	T	W	W_1
0603 (SOD-523F)	(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.

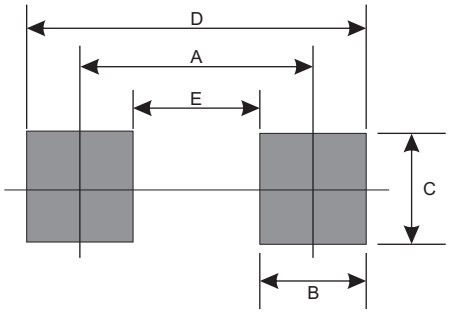
Marking Code

Park Number	Marking Code
CDBUR40-HF	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