



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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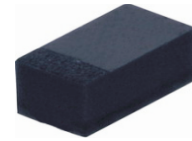
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



CDBURT0530LL-HF

Forward Current = 500 mA
Reverse Voltage = 20 Volts

RoHS Device
Halogen Free

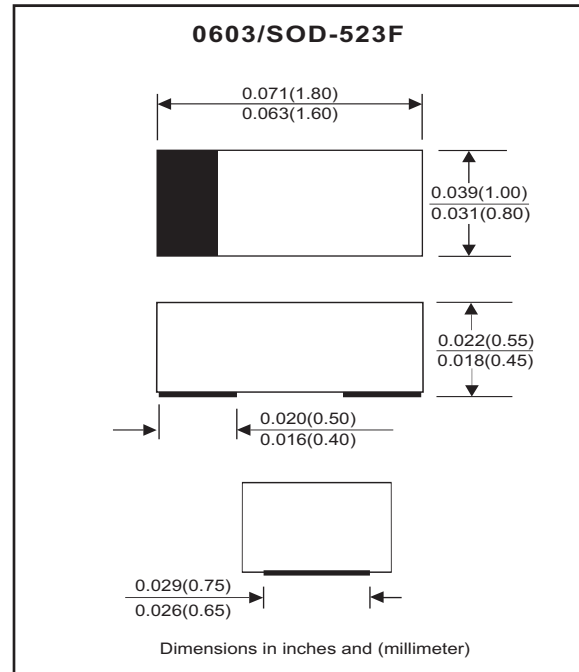


Features

- Ultra low forward voltage.
- Designed for mounting on small surface.
- Extremely thin / leadless package.
- Low profile package is 30% thinner than standards 0603
- Majority carrier conduction.
- ESD Rating: -Human Body Model: Class 3B
-Machine Model: Class C

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: BT,BS
- Mounting Position: Any
- Weight: 0.0019 grams(approx.).



Circuit diagram



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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Repetitive peak reverse voltage		V _{RRM}			30	V
Reverse voltage		V _R			20	V
Average forward current		I _O			500	mA
Forward current, surge peak	8.3ms single half sine-wave superimposed on rate load(JEDEC method)	I _{FSM}			5	A
Typical thermal resistance		R _{θJA}		260		°C/W
Junction temperature range		T _j	-55		+125	°C
Storage temperature range		T _{STG}	-55		+125	°C

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	I _F = 100 mA I _F = 500 mA	V _F			0.32 0.46	V
Reverse Current	V _R = 20 V	I _R		30	100	uA
Capacitance	V _R = 1 V, f=1MHz	C		30		pF

RATING AND CHARACTERISTIC CURVES (CDBURT0530LL-HF)

Fig.1 - Forward Current vs. Forward Voltage

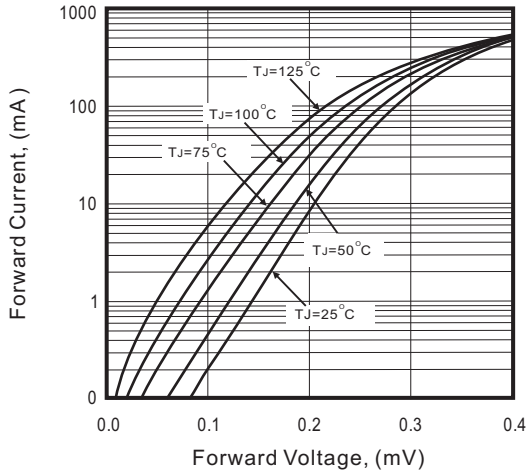


Fig.2 - Reverse Current vs. Reverse Voltage

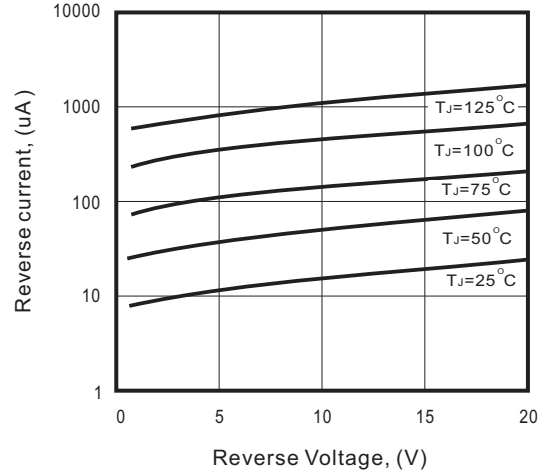


Fig.3 - Current Derating Curve

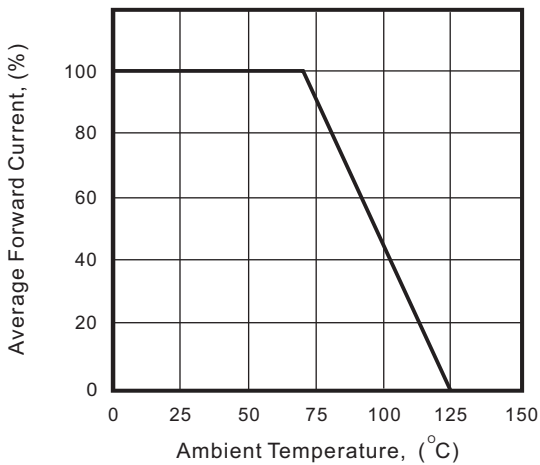
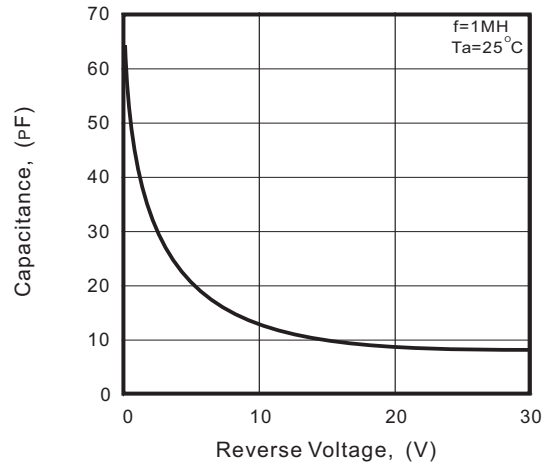
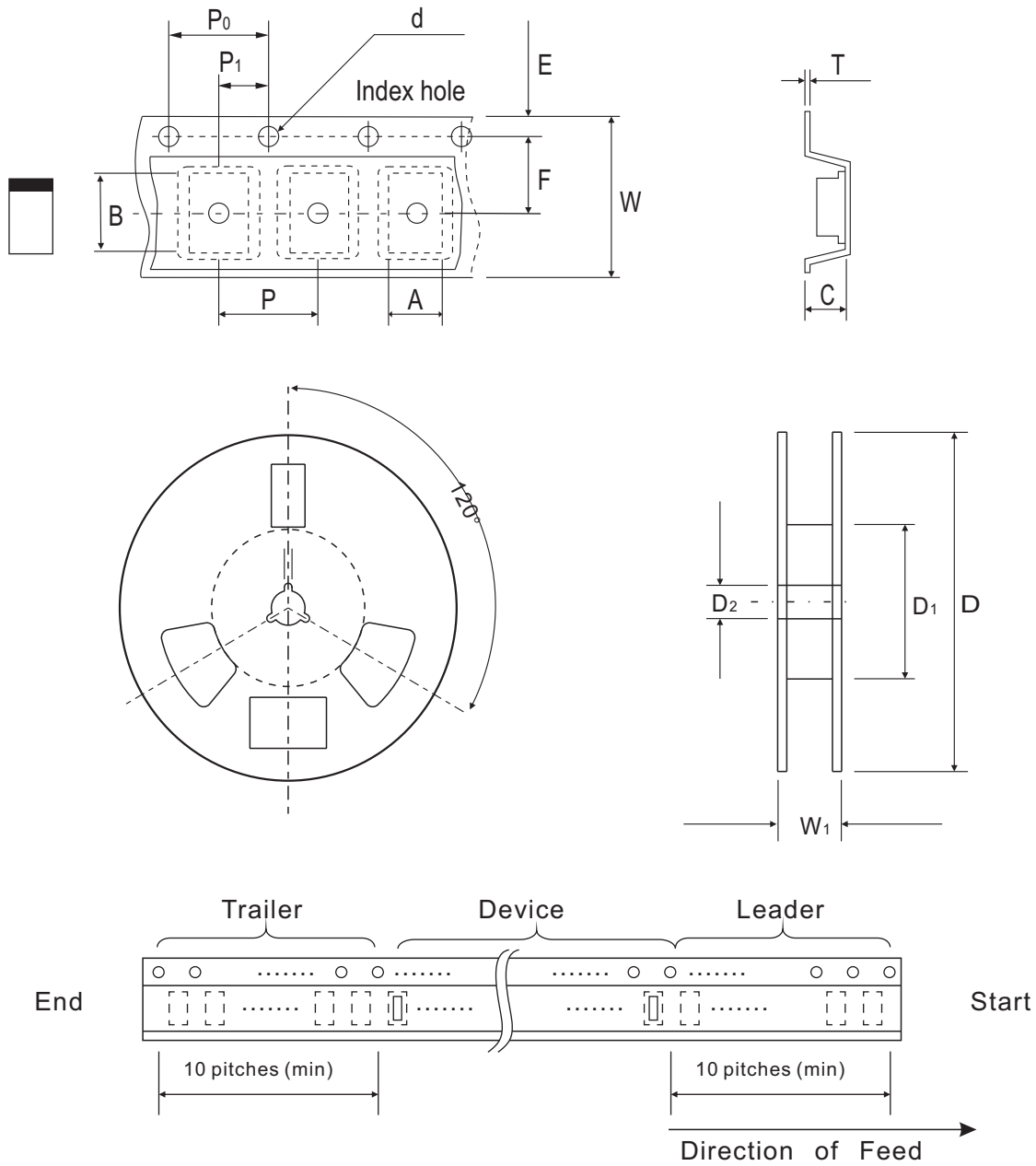


Fig.4 - Capacitance Between Terminals Characteristics



Reel Taping Specification



0603 (SOD-523F)	SYMBOL	A	B	C	d	D	D ₁	D ₂
	(mm)	1.05 ± 0.05	1.96 ± 0.05	0.57 ± 0.05	1.50 + 0.10	178 ± 1	60.0 MIN.	13.0 ± 0.20
	(inch)	0.041 ± 0.002	0.077 ± 0.002	0.022 ± 0.002	0.059 ± 0.004	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 ± 0.05	2.00 ± 0.05	0.20 ± 0.03	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 ± 0.002	0.008 ± 0.001	0.315 ± 0.008	0.531 MAX.

Marking Code

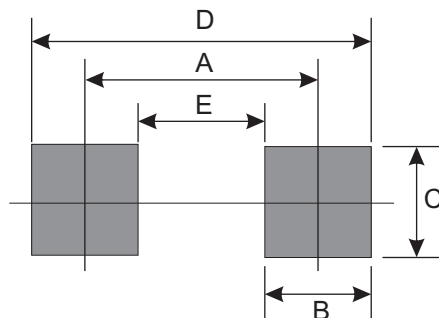
Part Number	Marking Code	
CDBURT0530LL-HF	BT	BS



xx = Product type marking code

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 Packaging

Case Type	Qty Per Reel	Reel Size
	(Pcs)	(inch)
0603/SOD-523F	4,000	7