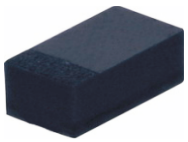
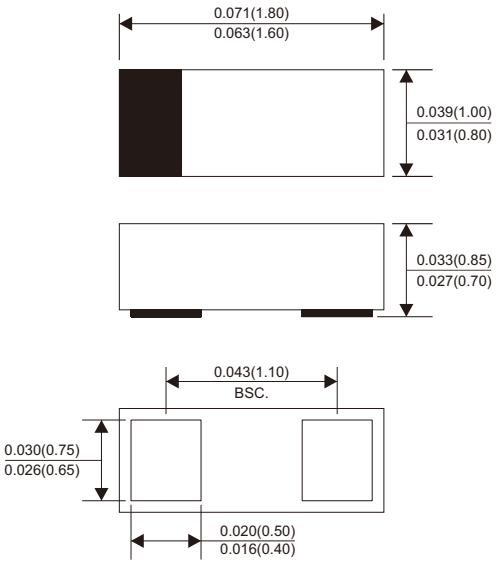
CDBUR0230R-HF

Io = 200 mA
V_R = 30 Volts
RoHS Device
Halogen Free



0603/SOD-523F



Dimensions in inches and (millimeter)

Features

- Low reverse current.
- 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.
- Mounting position: Any.
- Weight: 0.003 grams (approx.).

Circuit Diagram



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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Repetitive peak reverse voltage		V_{RRM}			35	V
Reverse voltage		V_R			30	V
Average forward current		I_O			200	mA
Forward current, surge peak	8.3ms single half sine-wave superimposed on rate load(JEDEC method)	I_{FSM}			1	A
Power dissipation		P_D			340	mW
Thermal resistance		$R_{\theta JA}$			300	°C/W
Storage temperature		T_{STG}	-40		+125	°C
Junction temperature		T_j			+125	°C

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	I_F = 200 mA	V_F			0.6	V
Reverse current	V_R = 10 V	I_R			1	μA
Diode junction capacitance	f = 1MHz, and 1 VDC reverse voltage	C_J		15		pF

Company reserves the right to improve product design , functions and reliability without notice.

Rating and Characteristic Curves (CDBUR0230R-HF)

Fig.1 - Forward Characteristics

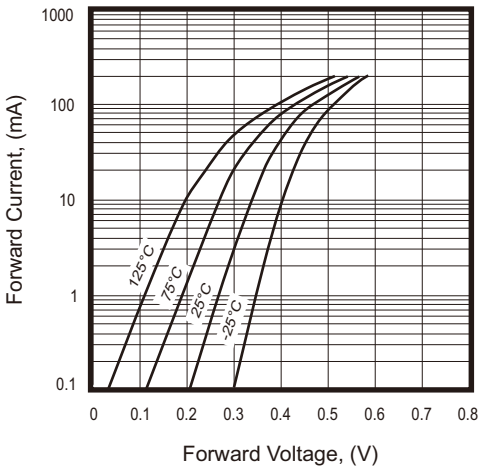


Fig.2 - Reverse Characteristics

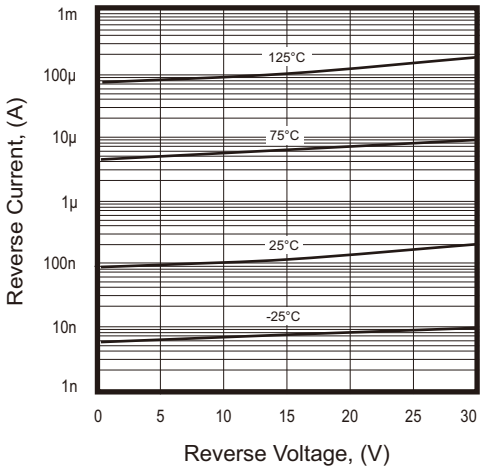


Fig.3 - Capacitance Between Terminals Characteristics

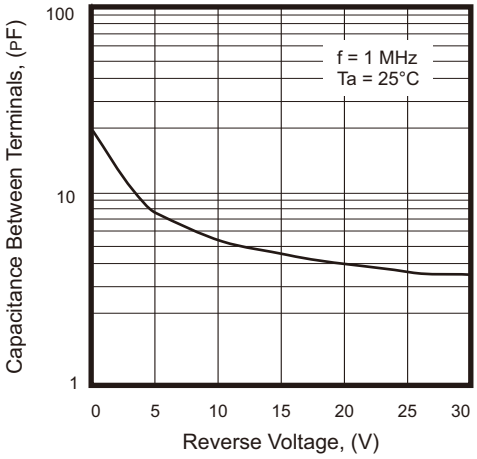


Fig.4 - Current Derating Curve

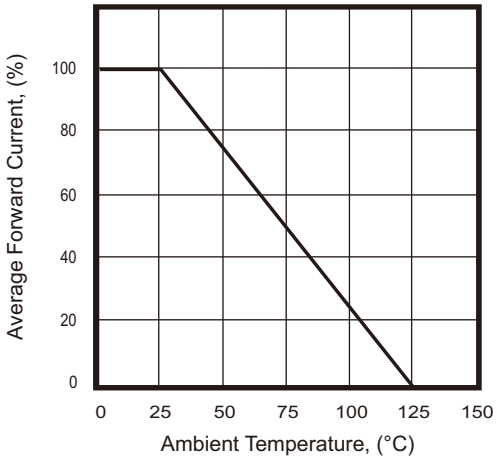


Fig.5 - VF Dispersion map

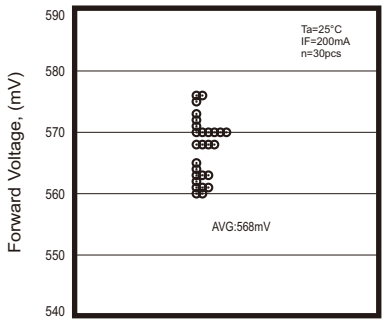


Fig.6 - IR Dispersion map

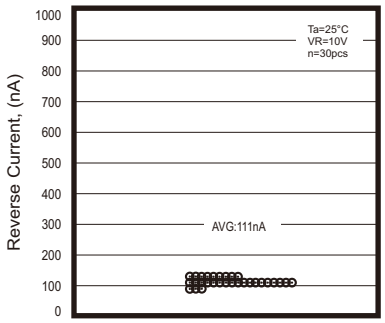
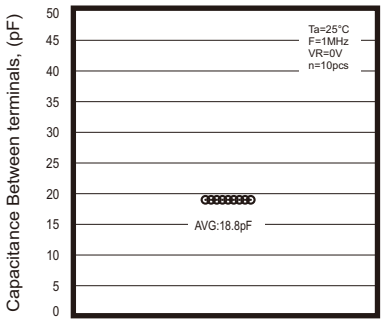
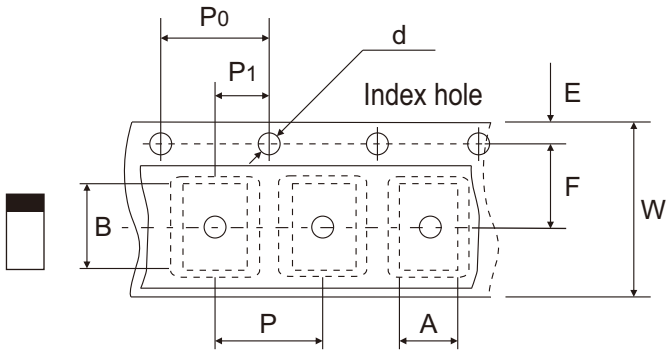
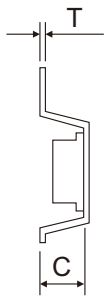


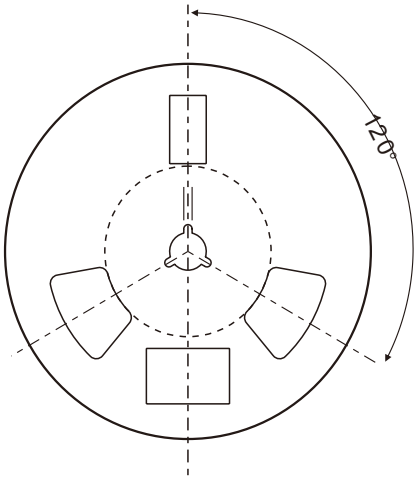
Fig.7 - CT Dispersion map

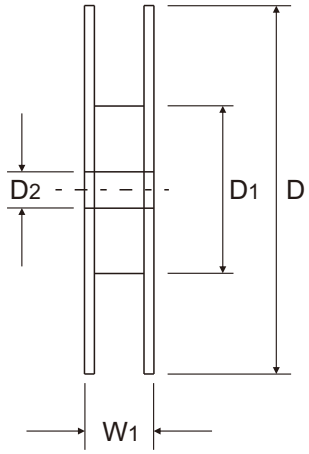


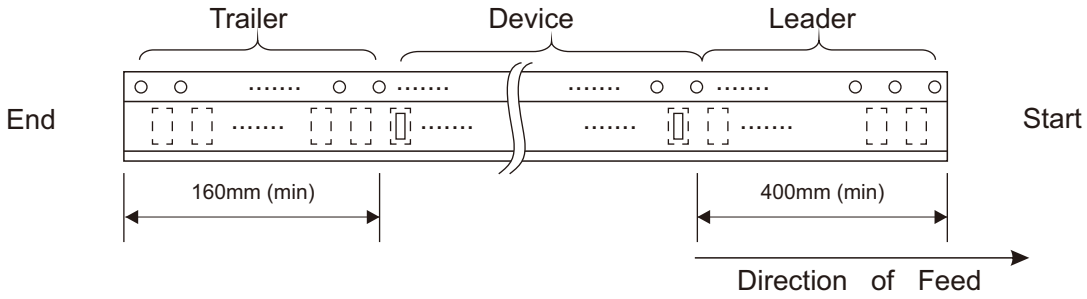
Reel Taping Specification











	SYMBOL	A	B	C	d	D	D1	D2
0603 (SOD-523F)	(mm)	1.16 ± 0.10	1.90 ± 0.10	0.95 ± 0.10	1.50 + 0.10 − 0.00	178.00 ± 1.00	60.00 ± 0.50	13.50 ± 0.20
	(inch)	0.046 ± 0.004	0.075 ± 0.004	0.037 ± 0.004	0.059 + 0.004 − 0.000	7.008 ± 0.039	2.362 ± 0.020	0.531 ± 0.008

	SYMBOL	E	F	P	P0	P1	T	W	W1
0603 (SOD-523F)	(mm)	1.75 ± 0.10	3.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	0.22 ± 0.03	8.00 ± 0.20	12.00 + 0.50 − 0.00
	(inch)	0.069 ± 0.004	0.138 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.009 ± 0.001	0.315 ± 0.008	0.472 + 0.020 − 0.000

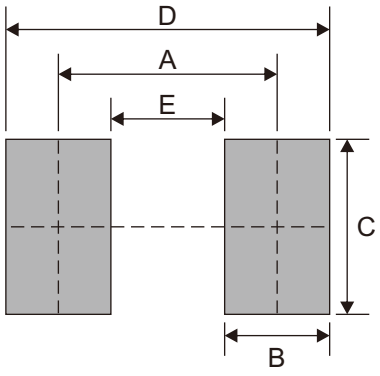
Marking Code

Part Number	Marking Code
CDBUR0230R-HF	BB



Suggested P.C.B. 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	REEL PACK	
	REEL (pcs)	Reel Size (inch)
0603/ SOD-523F	4,000	7