



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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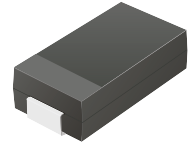


CDBC320-G Thru. CDBC3100-G

Reverse Voltage: 20 to 100 Volts

Forward Current: 3.0 Amp

RoHS Device

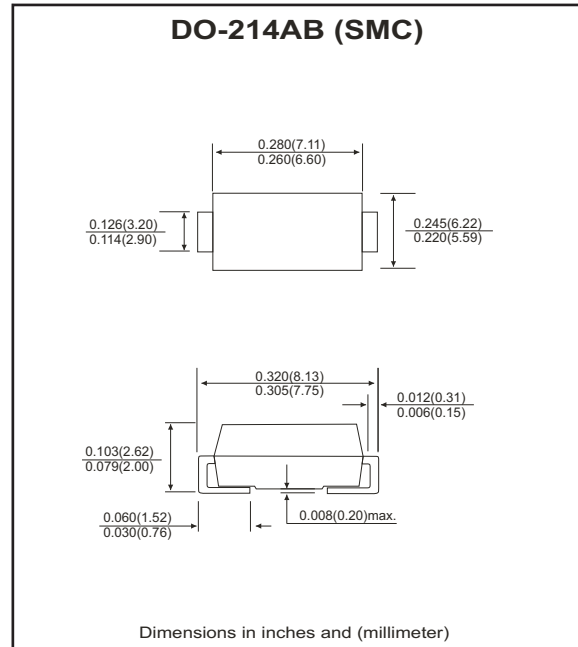


Features

- Ideal for surface mount applications.
- Easy pick and place.
- Plastic package has Underwriters Lab. flammability classification 94V-0.
- Built-in strain relief.
- Low forward voltage drop.

Mechanical data

- Case: JEDEC DO-214AB, molded plastic.
- Terminals: solderable per MIL-STD-750, method 2026.
- Polarity: Color band denotes cathode end.
- Approx. weight: 0.21 grams



Maximum Ratings and Electrical Characteristics

Parameter	Symbol	CDBC 320-G	CDBC 340-G	CDBC 360-G	CDBC 380-G	CDBC 3100-G	Units
Max. repetitive peak reverse voltage	V_{RRM}	20	40	60	80	100	V
Max. DC blocking voltage	V_{DC}	20	40	60	80	100	V
Max. RMS voltage	V_{RMS}	14	28	42	56	70	V
Peak surge forward current, 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	80					A
Max. average forward current	I_o	3.0					A
Max. instantaneous forward voltage at 3.0A	V_F	0.50		0.70	0.85		V
Max. DC reverse current at $T_A=25\text{ }^\circ\text{C}$ rated DC blocking voltage $T_A=100\text{ }^\circ\text{C}$	I_R	0.5					mA
		20		10			
Max. thermal resistance (Note 1)	$R_{\theta JA}$	50					$^\circ\text{C/W}$
	$R_{\theta JL}$	10					
Max. operating junction temperature	T_J	125					$^\circ\text{C}$
Storage temperature	T_{STG}	-65 to +150					$^\circ\text{C}$

Notes: 1. Thermal resistance from junction to ambient and junction to lead mounted on P.C.B. with 0.2×0.2 inch copper pad area.

RATING AND CHARACTERISTIC CURVES (CDBC320-G thru CDBC3100-G)

Fig.1 Reverse Characteristics

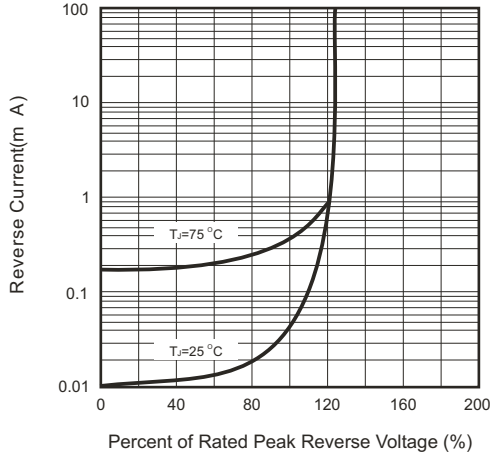


Fig.2 Forward Characteristics

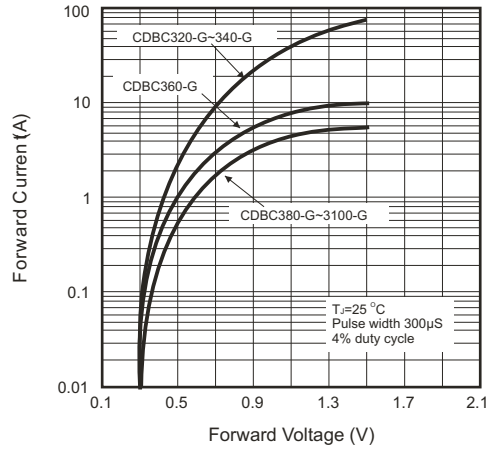


Fig.3 Junction Capacitance

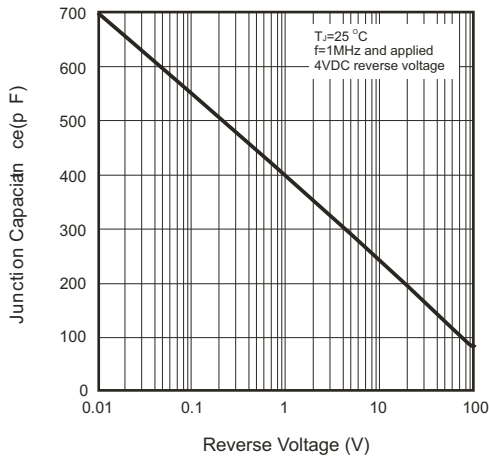


Fig.4 Current Derating Curve

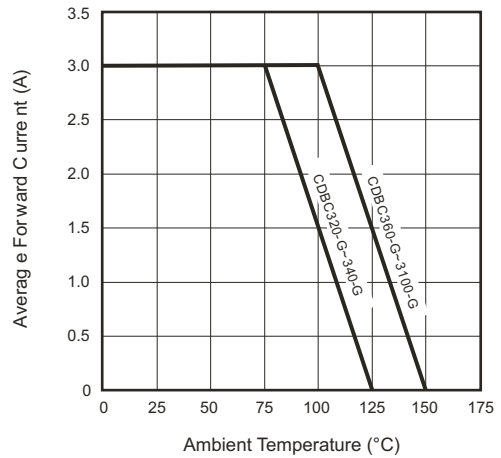
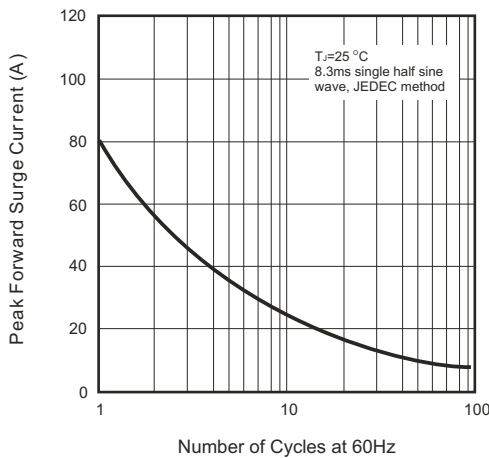
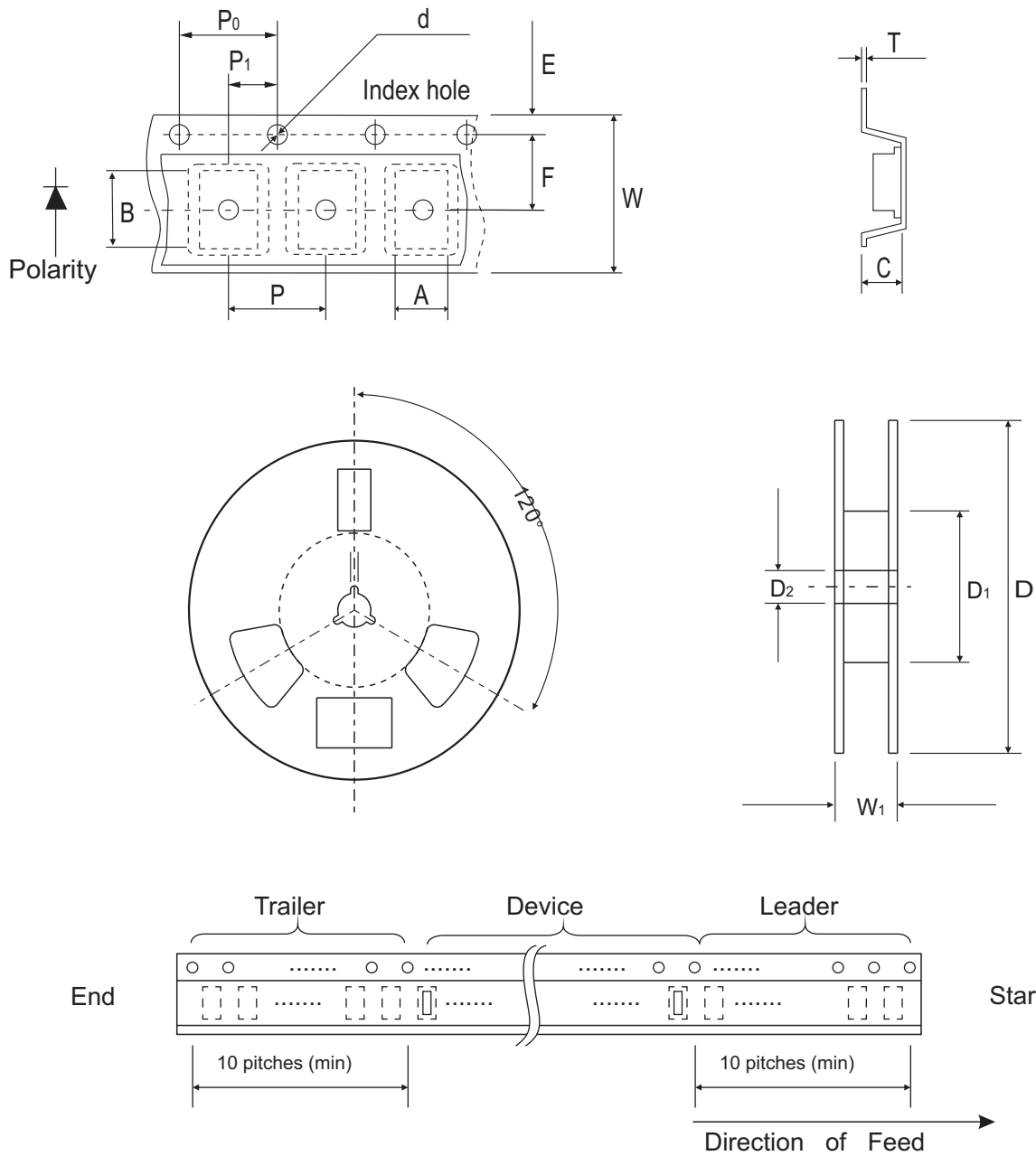


Fig.5 Non-repetitive Forward Surge Current



Reel Taping Specification

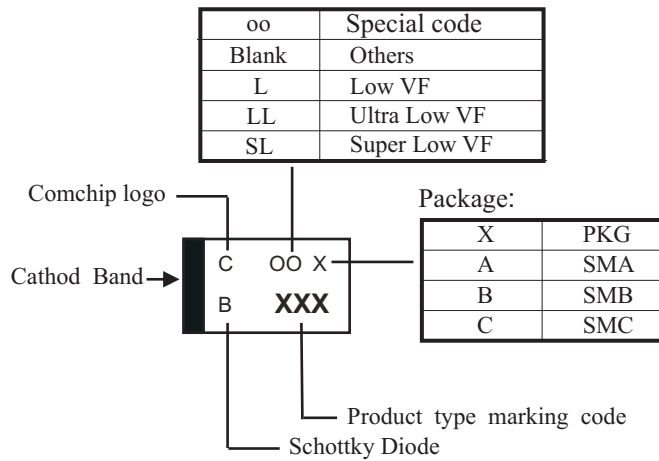


SMC (DO-214AB)	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	6.30 (max)	8.60 (max)	2.90 (max)	1.50 ± 0.10	330	50.0 MIN.	13.5 ± 1.00
	(inch)	0.248 (max)	0.339 (max)	0.114 (max)	0.059 ± 0.004	12.99	1.969 MIN.	0.531 ± 0.039

SMC (DO-214AB)	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	7.50 ± 0.05	8.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	16.0 ± 0.20	22.4 (max)
	(inch)	0.689 ± 0.004	0.295 ± 0.002	0.315 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.630 ± 0.008	0.882 (max)

Marking Code

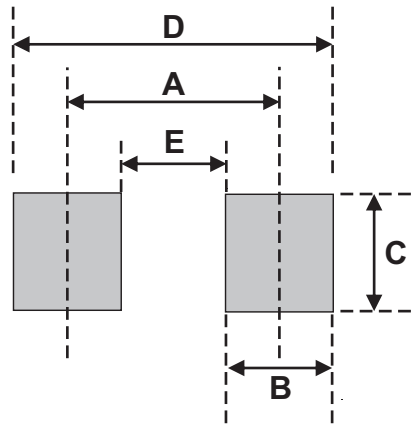
Part Number	Marking Code
CDBC320-G	320
CDBC340-G	340
CDBC360-G	360
CDBC380-G	380
CDBC3100-G	3100



xxx/xxxx = Product type marking code

Suggested PAD Layout

SIZE	DO-214AB(SMC)	
	(mm)	(inch)
A	6.20	0.244
B	1.60	0.063
C	4.80	0.189
D	7.80	0.307
E	4.60	0.181



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
DO-214AB (SMC)	3,000	13