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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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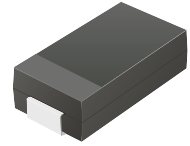


## CDBA120-G Thru. CDBA1100-G

Reverse Voltage: 20 to 100 Volts

Forward Current: 1.0 Amp

RoHS Device

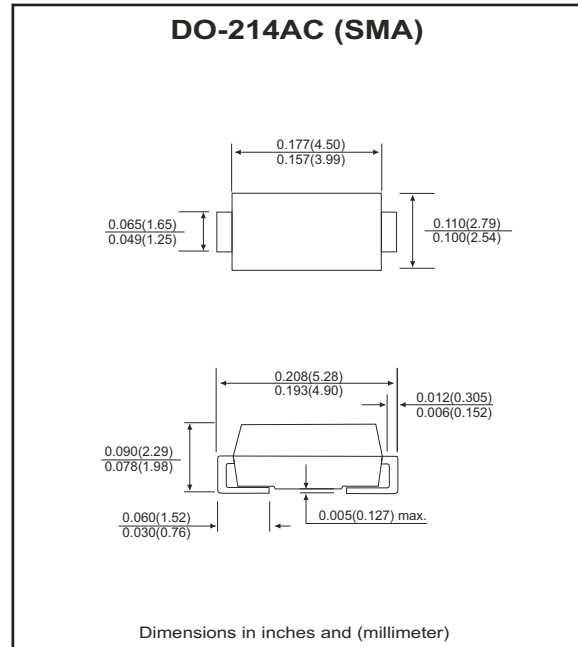


### Features

- 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-214AC, molded plastic.
- Terminals: solderable per MIL-STD-750, method 2026.
- Polarity: Color band denotes cathode end.
- Approx. weight: 0.064 grams



### Maximum Ratings and Electrical Characteristics

Parameter	Symbol	CDBA 120-G	CDBA 140-G	CDBA 160-G	CDBA 180-G	CDBA 1100-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 forward surge current, 8.3ms single half sine-wave superimposed on rate load (JEDEC Method)	$I_{FSM}$	30					A
Max. average forward rectified current 0.375" (9.5mm) lead length(see fig.1)	$I_{(AV)}$	1.0					A
Max. instantaneous forward voltage at 1.0A(Note 1)	$V_F$	0.55		0.75		0.85	V
Max. instantaneous reverse current at rated DC blocking voltage(Note 1)	$T_A=25\text{ }^\circ\text{C}$	$I_R$	0.5				mA
	$T_A=125\text{ }^\circ\text{C}$		10				
Max. thermal resistance (Note 2)	$R_{\theta JA}$	88					$^\circ\text{C/W}$
	$R_{\theta JL}$	28					
Operating and storage temperature Range	$T_J$	-65 to +125		-65 to +150			$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-65 to +150					$^\circ\text{C}$

Notes:

1. P.C.B. Mounted with 0.2x0.2 inch (5.0\*5.0mm) copper pad .
2. Pulse test: 300 $\mu$ s width, 1% duty cycle.

## RATING AND CHARACTERISTIC CURVES (CDBA120-G thru CDBA1100-G)

Fig.1 - Forward Current Derating Curve

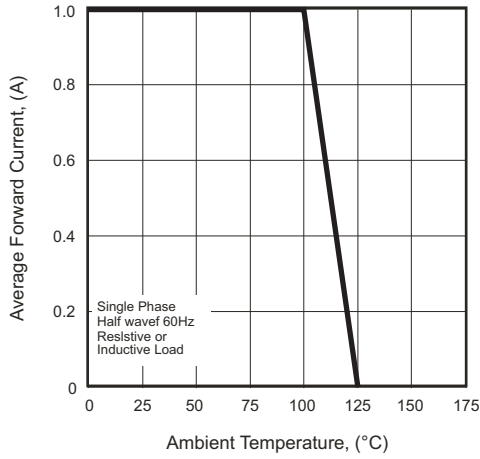


Fig.2 - MAXMUM Non-Repetitive Surge Current

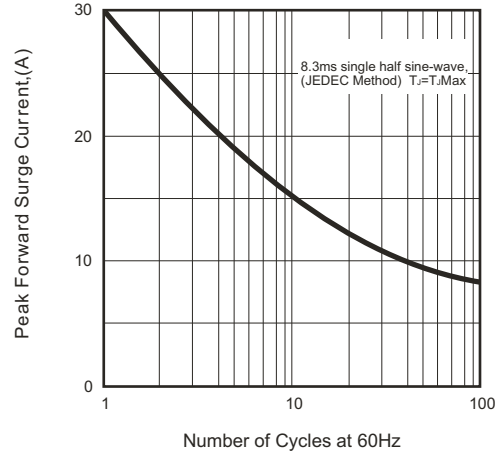


Fig.3 - Forward Characteristics

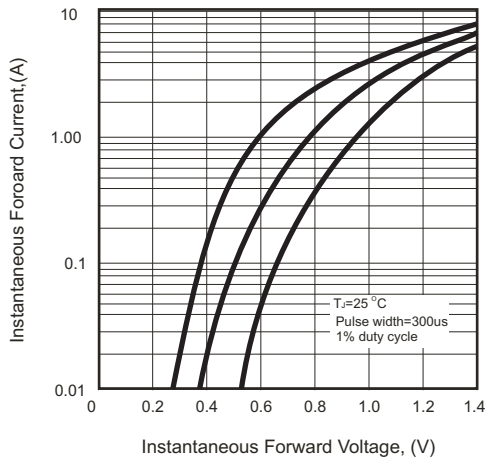


Fig.4 - Typical Junction Capacitance

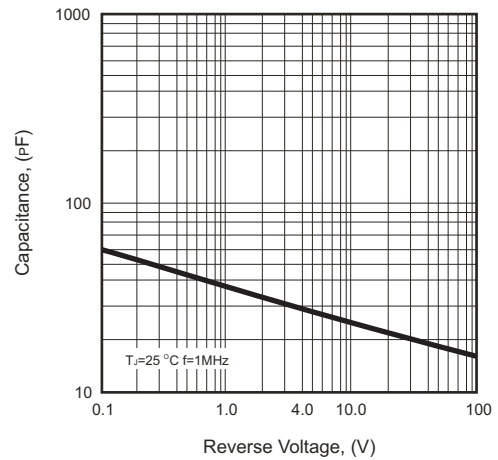
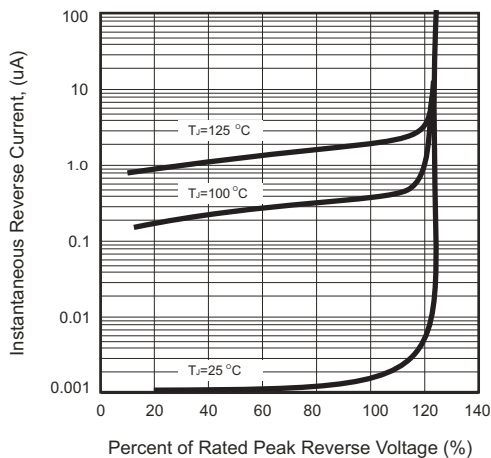
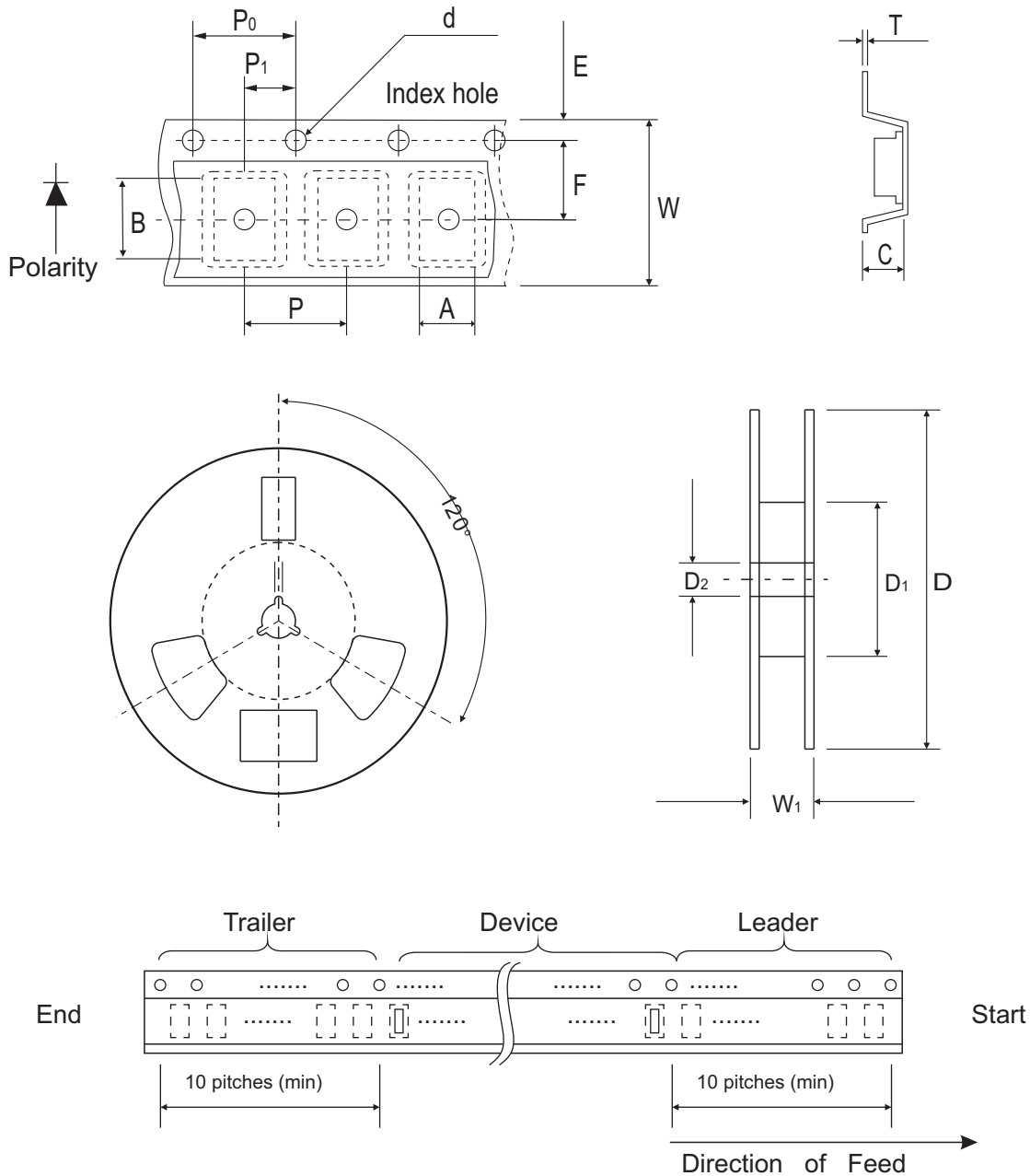


Fig.5 - Typical Reverse Characteristics



## Reel Taping Specification

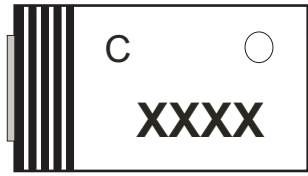


SMA (DO-214AC)	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	2.70 (max)	5.30 (max)	2.66 (max)	1.50 ± 0.10	330 ± 2.00	50.0 MIN.	13.5 ± 1.00
	(inch)	0.106 (max)	0.209 (max)	0.105 (max)	0.059 ± 0.004	12.99 ± 0.079	1.969 MIN.	0.531 ± 0.039

SMA (DO-214AC)	SYMBOL	E	F	P	P0	P1	W	W1
	(mm)	1.75 ± 0.10	5.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	12.0 ± 0.30	18.4 (max)
	(inch)	0.689 ± 0.004	0.217 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.472 ± 0.012	0.724 (max)

## Marking Code

Comchip logo



Package:

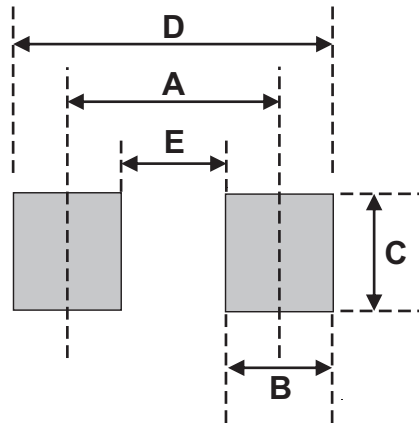
○	PKG
A	SMA
B	SMB
C	SMC

Product type marking code:

Part Number	Marking Code
CDBA120-G	B120
CDBA140-G	B140
CDBA160-G	B160
CDBA180-G	B180
CDBA1100-G	B1100

## Suggested PAD Layout

SIZE	DO-214AC(SMA)	
	(mm)	(inch)
A	3.80	0.150
B	1.60	0.063
C	2.80	0.110
D	5.40	0.213
E	2.20	0.087



## Standard Packaging

Case Type	REEL PACK	
	REEL ( pcs )	Reel Size (inch)
DO-214AC (SMA)	5,000	13