



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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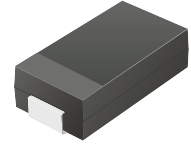
CDBA120LL-HF Thru. CDBA140LL-HF

Reverse Voltage: 20 to 40 Volts

Forward Current: 1.0 Amp

RoHS Device

Halogen free

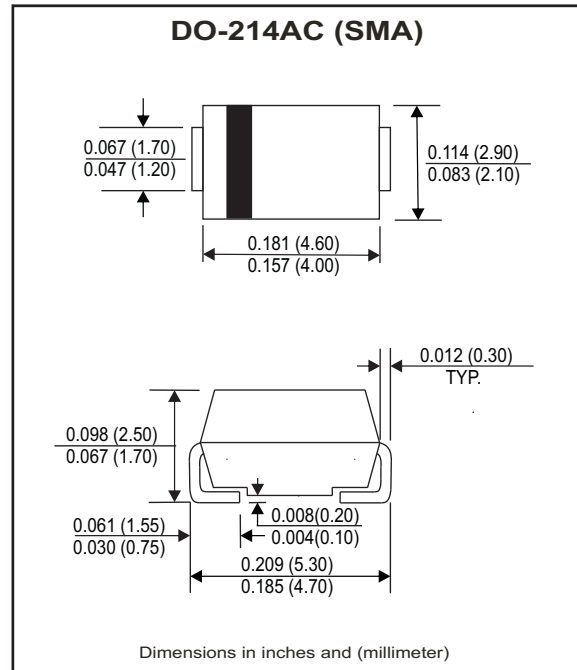


Features

- Low Profile surface mount applications in order to optimize board space.
- Low power loss, high efficiency.
- High current capability, low forward voltage drop.
- High surge capability.
- Guarding for overvoltage protection.
- Ultra high-speed switching.
- Silicon epitaxial planar chip, metal silicon junction.

Mechanical data

- Case: JEDEC DO-214AC / SMA, molded plastic.
- Epoxy: UL 94V-0 rate flame retardant.
- Terminals: Solder plated, Solderable per MIL-STD-750, method 2026.
- Polarity: Indicated by cathode band.
- Mounting position: Any.
- Weight: 0.055 grams



Maximum Ratings and Electrical Characteristics

Ratings at Ta=25°C unless otherwise noted.
Single phase, half wave, 60Hz, resistive or inductive loaded.
For capacitive load, derate current by 20% .

Parameter	Symbol	CDBA120LL-HF	CDBA130LL-HF	CDBA140LL-HF	Unit
Max. Recurrent Peak Reverse Voltage	VRRM	20	30	40	V
Max. RMS Voltage	VRMS	14	21	28	V
Max. DC Blocking Voltage	VDC	20	30	40	V
Max. Instantaneous Forward Voltage @1.0A, TA=25°C	VF	0.33	0.35		V
Max. Forward Rectified Current (See Fig.1)	IO	1.0			A
Max. Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	IFSM	50			A
Max. Reverse Current	VR=VRRM TJ=25°C	IR	1.0		mA
	VR=VRRM TJ=100°C		20		
Typical Thermal Resistance (Note 1)	RθJA	80			°C/W
Typical Diode Junction Capacitance(Note 2)	CJ	130			pF
Operating Temperature Range	TJ	-50 to +100			°C
Storage Temperature Range	TSTG	-50 to +150			°C

NOTES:
1. Thermal resistance from junction to ambient.
2. F=1MHz and applied 4V DC reverse Voltage.

RATING AND CHARACTERISTIC CURVES (CDBA120LL-HF thru CDBA140LL-HF)

Fig.1 - Typical Forward Current Derating Curve

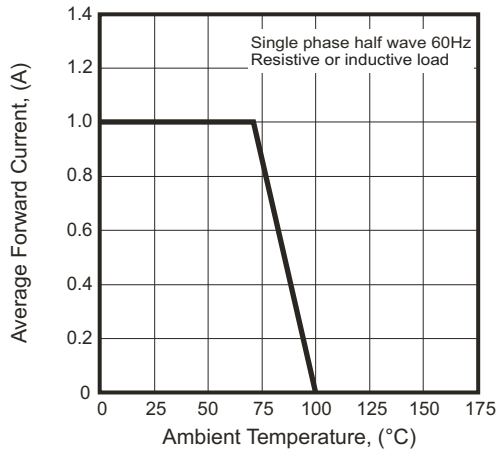


Fig.2 - Typical Forward Characteristics

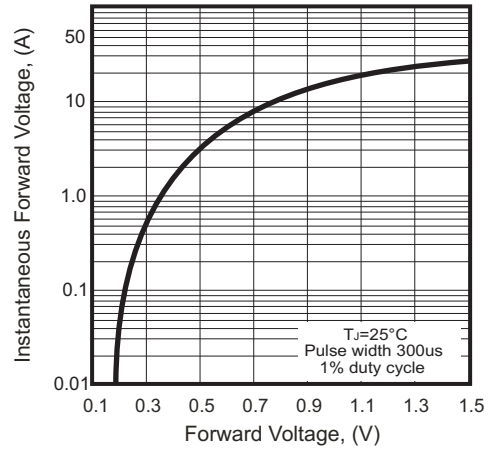


Fig.3 - Maximum Non-repetitive Forward Surge Current

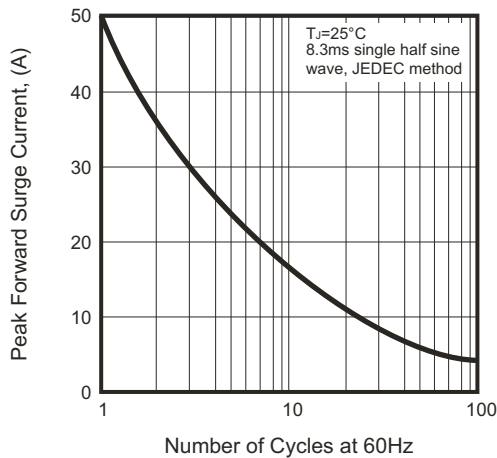


Fig.4 - Typical Junction Capacitance

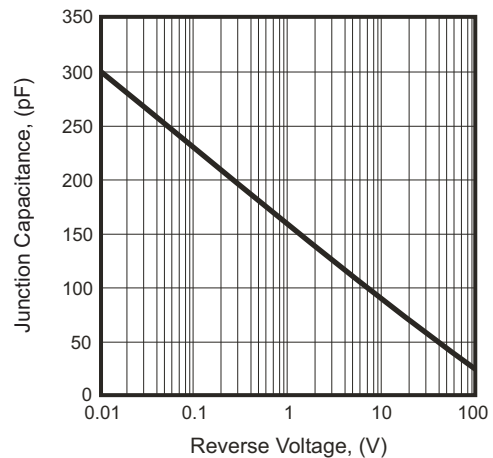
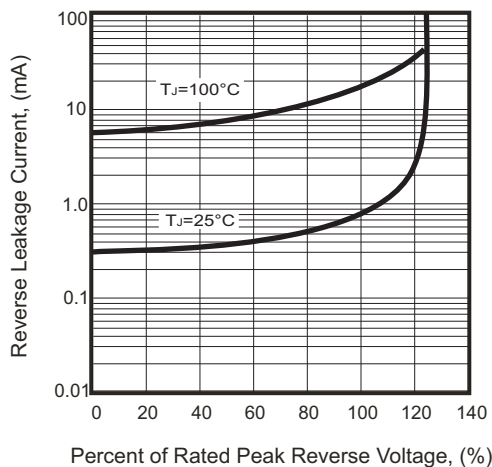
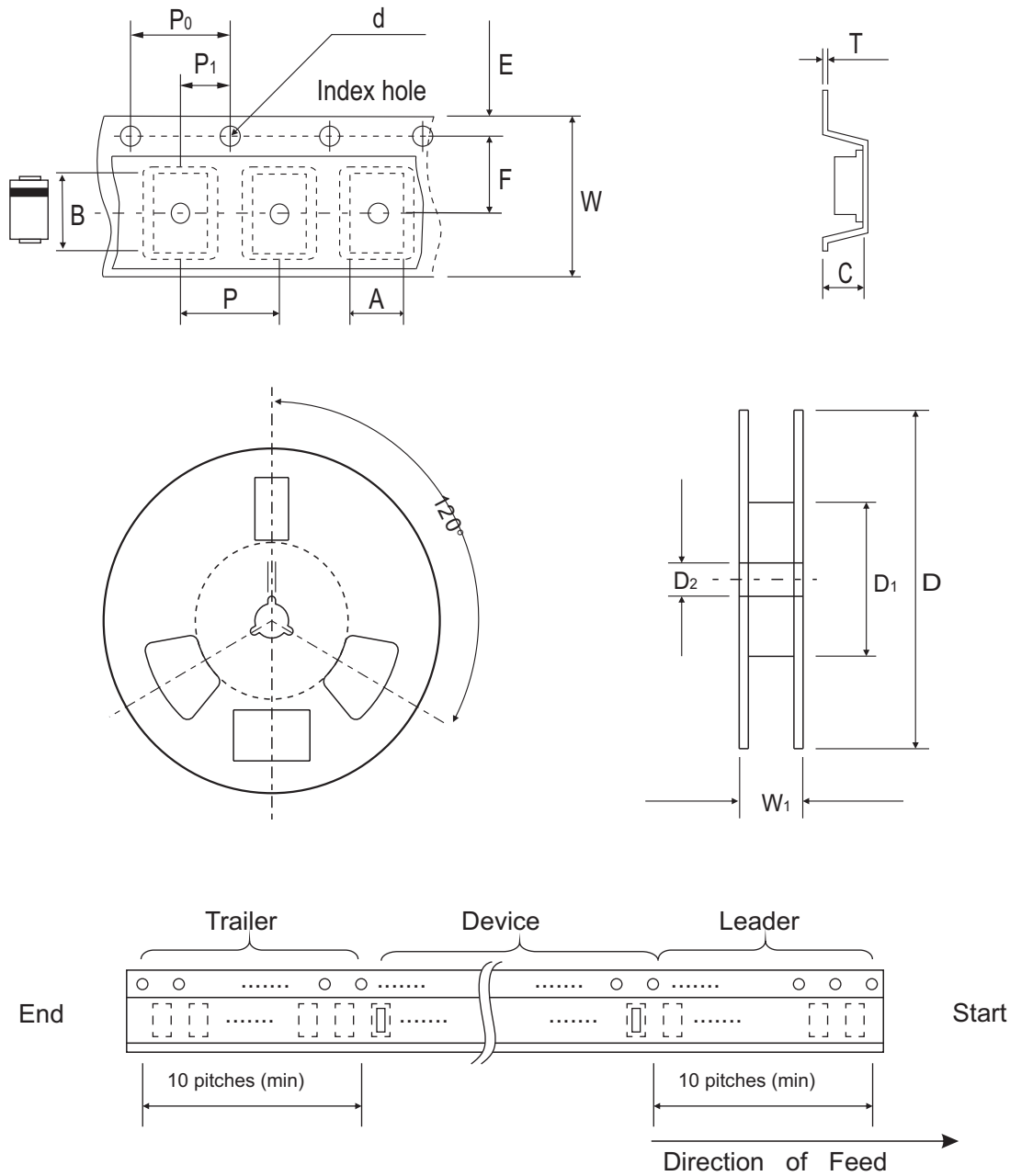


Fig.5 - Typical Reverse Characteristics



Reel Taping Specification

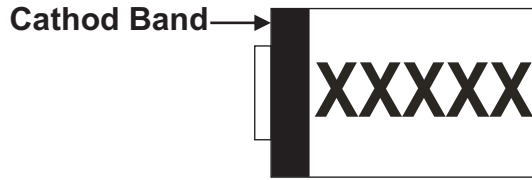


DO-214AC (SMA)	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	2.70 ± 0.10	5.30 ± 0.10	2.66 ± 0.10	1.50 ± 0.10	330 ± 2.00	62.0 MIN.	13.50 ± 0.50
	(inch)	0.106 ± 0.004	0.209 ± 0.004	0.105 ± 0.004	0.059 ± 0.004	12.99 ± 0.079	2.441 MIN.	0.531 ± 0.020

DO-214AC (SMA)	SYMBOL	E	F	P	P0	P1	T	W	W1
	(mm)	1.75 ± 0.10	5.50 ± 0.10	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	0.60 ± 0.10	12.0 ± 0.30	18.40 ± 1.00
	(inch)	0.069 ± 0.004	0.217 ± 0.004	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.236 ± 0.004	0.472 ± 0.012	0.724 ± 0.039

Marking Code

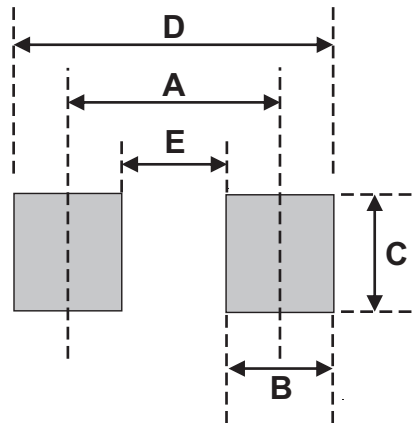
Part Number	Marking Code
CDBA120LL-HF	SLL12
CDBA130LL-HF	SLL13
CDBA140LL-HF	SLL14



XXXXXX = Product type marking code

Suggested PAD Layout

SIZE	DO-214AC (SMA)	
	(mm)	(inch)
A	4.00	0.157
B	2.50	0.100
C	1.70	0.068
D	6.50	0.256
E	1.50	0.060



Standard Packaging

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