

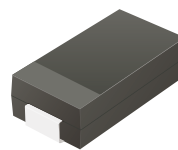
CDBA340L-HF

Reverse Voltage: 40 V

Forward Current: 3 A

RoHS Device

Halogen free

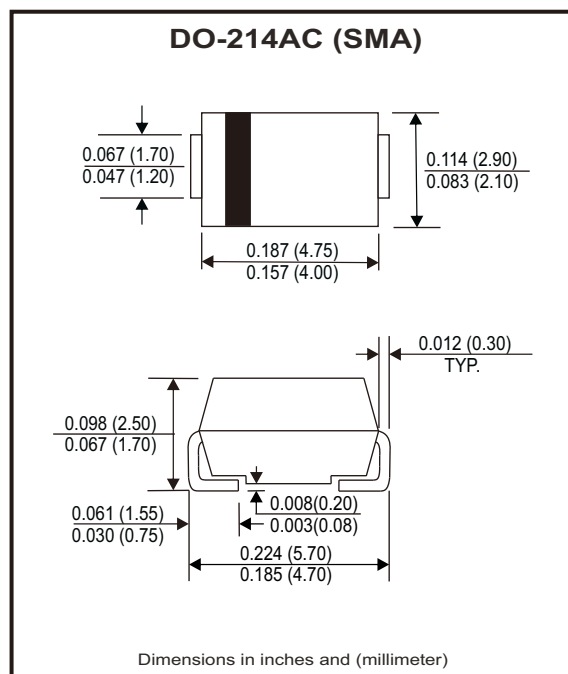


Features

- 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.
- Guard ring for overvoltage protection.
- Ultra high-speed switching.
- Silicon epitaxial planar chip, metal silicon junction.

Mechanical data

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



Circuit Diagram



Maximum Ratings (at $T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Conditions	Symbol	Value	Unit
Working peak reverse voltage		V_{RRM}	40	V
Forward rectified current		I_O	3	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	70	A
Thermal Resistance	Junction to case	$R_{\theta JC}$	40	$^\circ\text{C/W}$
	Junction to ambient	$R_{\theta JA}$	70	$^\circ\text{C/W}$
Operating junction temperature range		T_J	-55 to +125	$^\circ\text{C}$
Storage temperature range		T_{STG}	-55 to +150	$^\circ\text{C}$

Electrical Characteristics (at $T_A=25^\circ\text{C}$ unless otherwise specified)

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	Unit
Forward voltage drop	$I_F = 3\text{A}$, $T_J = 25^\circ\text{C}$	V_F		330	400	mV
Reverse current	$V_R = V_{RRM}$, $T_J = 25^\circ\text{C}$	I_R		0.2	1	mA
	$V_R = V_{RRM}$, $T_J = 100^\circ\text{C}$				80	
Reverse blocking voltage	$I_R = 1\text{mA}$, $T_J = 25^\circ\text{C}$	V_{BR}	40			V

Typical Rating and Characteristic Curves (CDBA340L-HF)

Fig.1 - Instantaneous Forward Characteristics

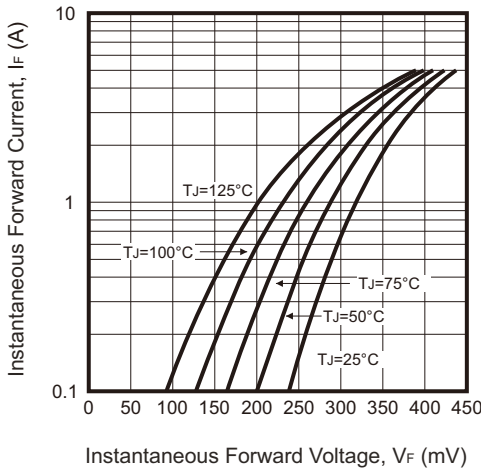


Fig.2 - Reverse Characteristics

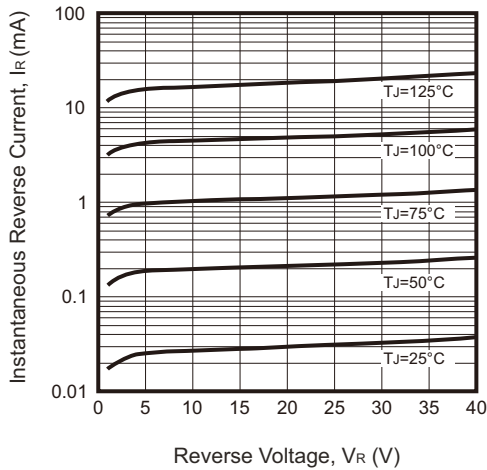


Fig.3 - Typical Forward Current Derating Curve

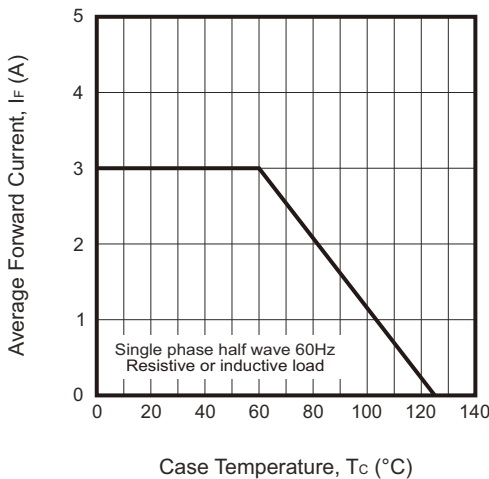
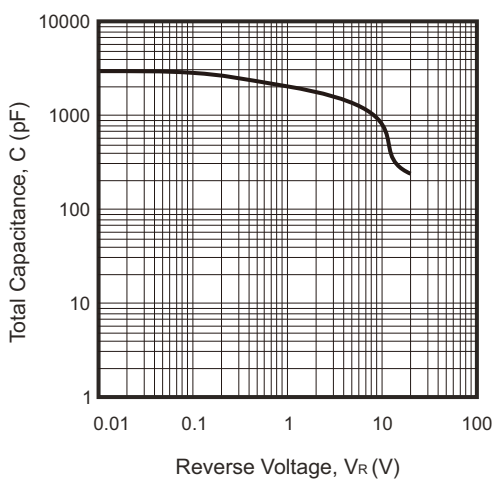
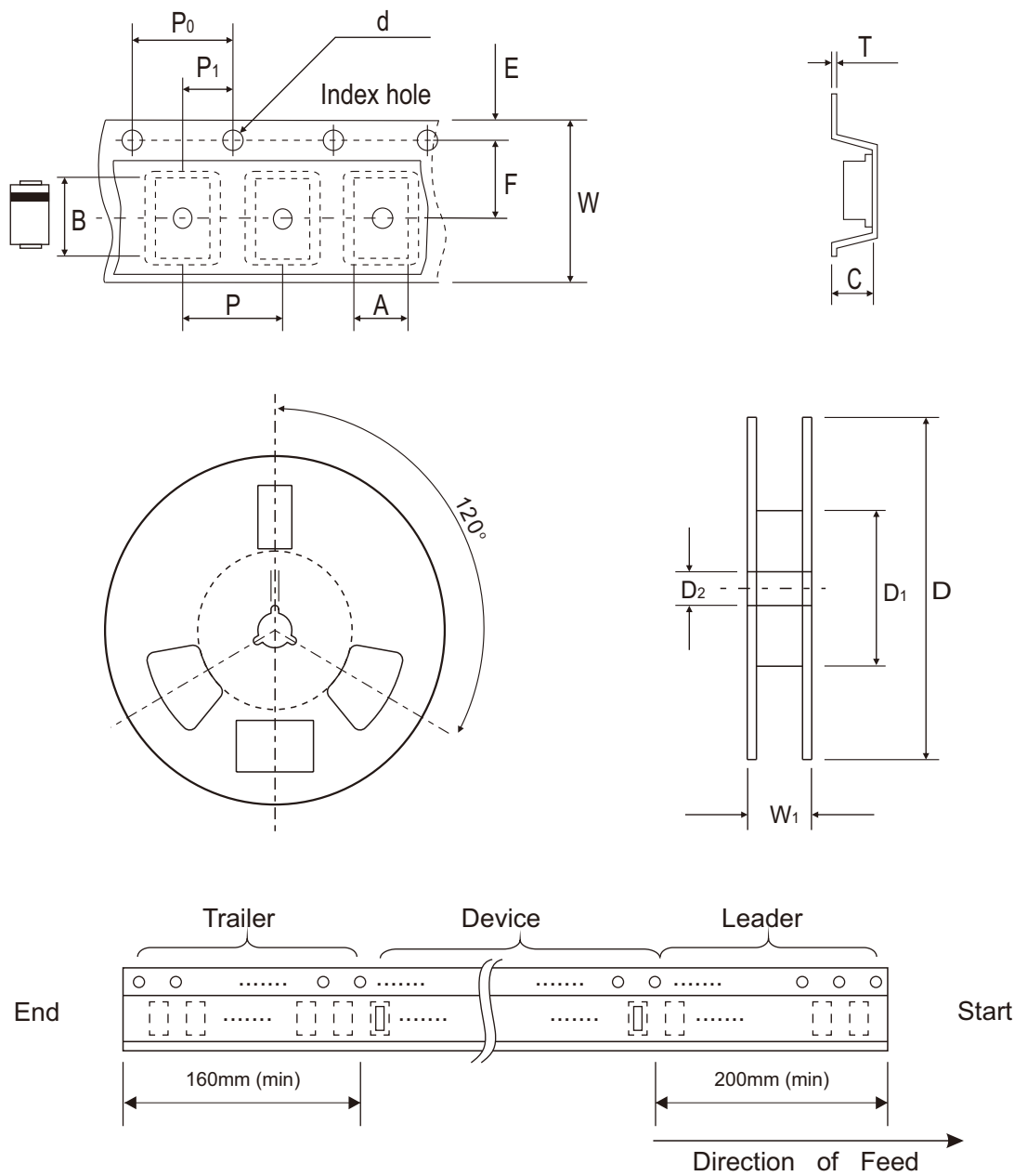


Fig.4 - Total Capacitance VS. Reverse Voltage



Reel Taping Specification

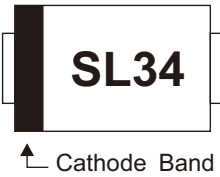


DO-214AC (SMA)	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	2.70 ± 0.10	5.30 ± 0.10	2.66 ± 0.10	1.50 ± 0.10	330 ± 2.00	62.0 MIN.	13.50 ± 0.50
	(inch)	0.106 ± 0.004	0.209 ± 0.004	0.105 ± 0.004	0.059 ± 0.004	12.99 ± 0.079	2.441 MIN.	0.531 ± 0.020

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

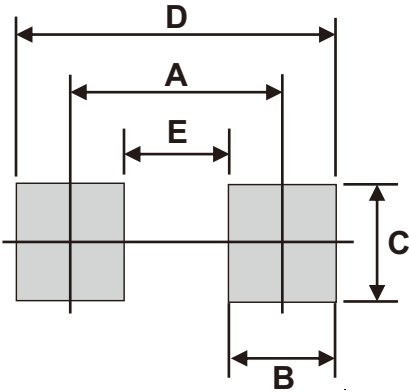
Marking Code

Part Number	Marking Code
CDBA340L-HF	SL34



Suggested P.C.B. PAD Layout

SIZE	DO-214AC (SMA)	
	(mm)	(inch)
A	4.10	0.161
B	2.60	0.102
C	1.70	0.068
D	6.70	0.264
E	1.50	0.060



Standard Packaging

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