

## CDBC360LR-HF

Reverse Voltage: 60 V

Forward Current: 3 A

RoHS Device

Halogen Free

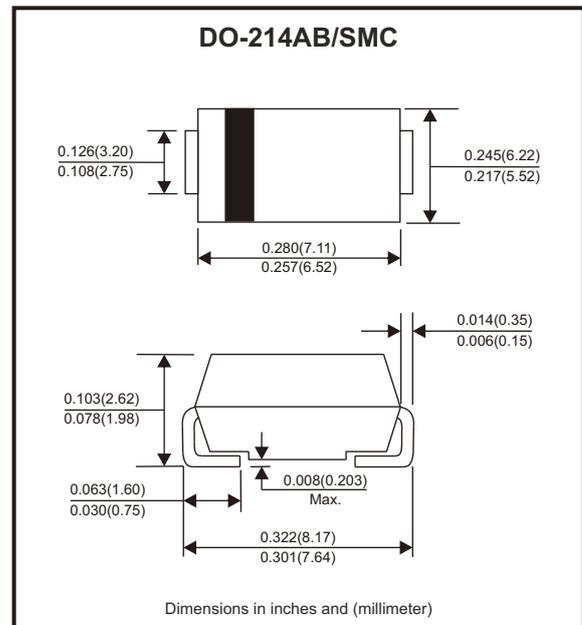


### Features

- Low profile package.
- Ideal for automated placement.
- Guard ring for over voltage protection.
- Low forward voltage drop.

### Mechanical data

- Case: SMC/DO-214AB, molded plastic.
- Epoxy: UL flammability classification rating 94V-0.
- Terminals: Lead free plating (Tin Finish).  
solderable per MIL-STD-202, method 208.
- Polarity: Cathode band.



### Circuit Diagram



### Maximum Ratings and Electrical Characteristics (TA=25°C unless otherwise noted)

Parameter	Symbol	CDBC360LR-HF	Units
Max. repetitive peak reverse voltage	V <sub>RRM</sub>	60	V
Max. RMS voltage	V <sub>RMS</sub>	42	V
Max. DC blocking voltage	V <sub>DC</sub>	60	V
Max.average forward rectified current	I <sub>F</sub>	3	A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	I <sub>FSM</sub>	125	A
Maximum instantaneous forward voltage I <sub>F</sub> =3A @ 25°C	V <sub>F</sub>	0.55	V
Maximum DC reverse current @ TA=25°C at rated DC blocking voltage @ TA=100°C	I <sub>R</sub>	0.5 10	mA
Typical junction capacitance (Note 1)	C <sub>J</sub>	210	pF
Typical thermal resistance	R <sub>θJC</sub>	25	°C/W
Operating temperature range	T <sub>J</sub>	-55 to +125	°C
Storage temperature range	T <sub>STG</sub>	-55 to +150	°C

Notes: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2. Device mounted on FR-4 substrate, 0.4" x 0.5", 2oz, single-sided, PC boards with 0.2" x 0.25" copper pad.

## Rating and Characteristic Curves (CDBC360LR-HF)

Fig.1 - Typical Forward Current Derating Curve

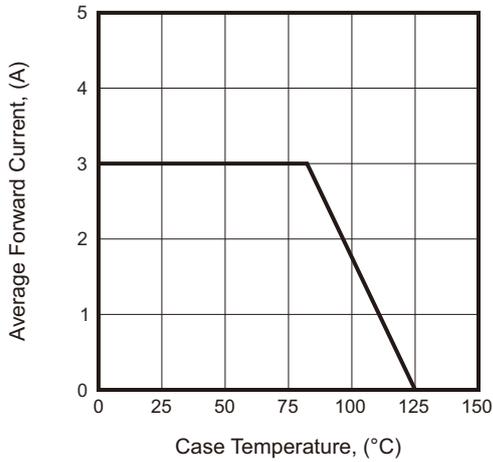


Fig.2 - Typical Forward Characteristics

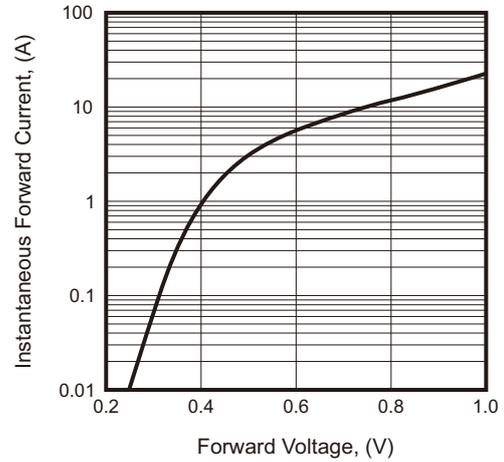


Fig.3 - Maximum Non-Repetitive Forward Surge Current

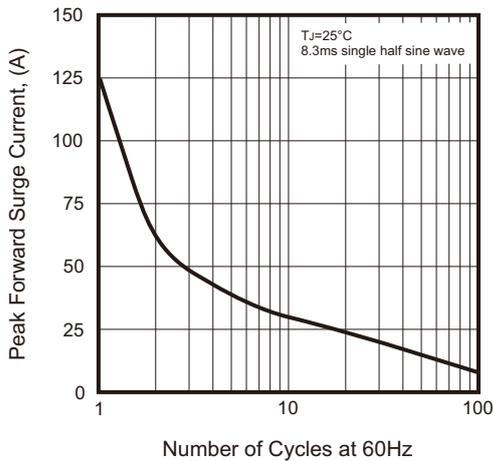


Fig.4 - Typical Reverse Characteristics

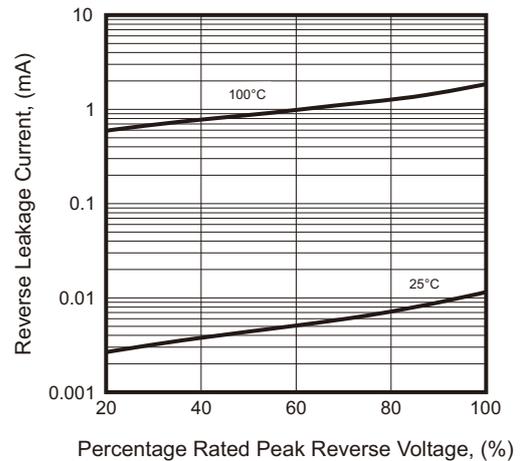
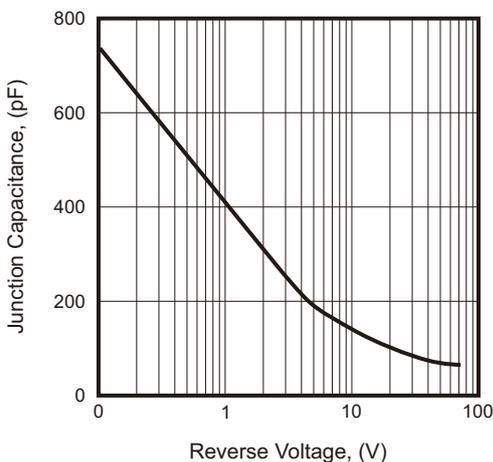
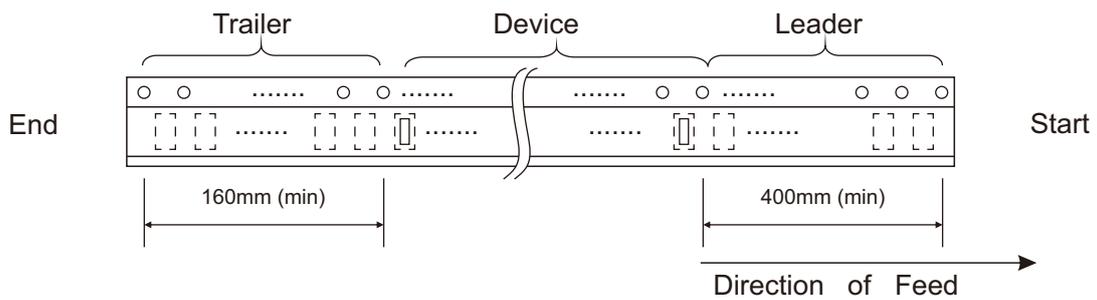
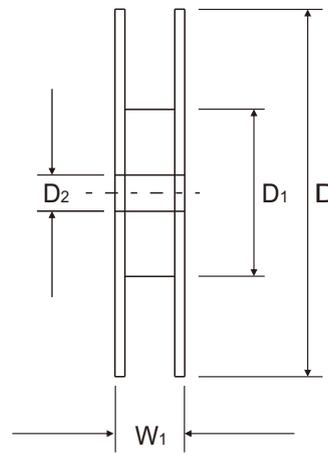
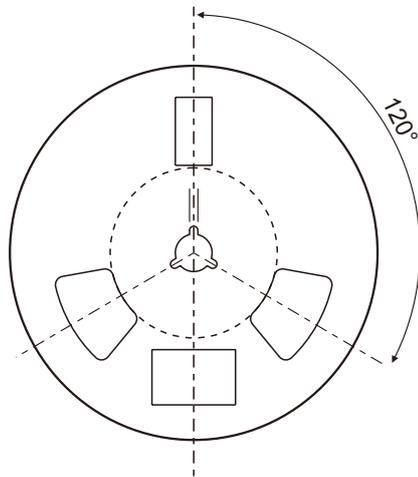
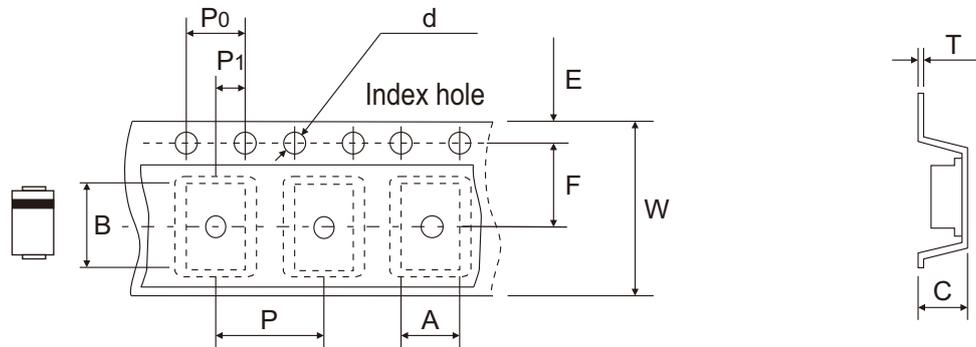


Fig.5 - Typical Junction Capacitance



## Reel Taping Specification



DO-214AB (SMC)	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	6.30 Max.	8.60 Max.	2.90 Max.	1.50 ± 0.10	330 ± 2.00	50 Min.	13.50 ± 1.00
	(inch)	0.248 Max.	0.339 Max.	0.114 Max.	0.059 ± 0.004	12.992 ± 0.079	1.969 Min.	0.531 ± 0.039

DO-214AB (SMC)	SYMBOL	E	F	P	P0	P1	T	W	W1
	(mm)	1.75 ± 0.10	7.50 ± 0.10	8.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	0.60 Max.	16.00 ± 0.30	22.40 Max.
	(inch)	0.069 ± 0.004	0.295 ± 0.004	0.315 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.024 Max.	0.630 ± 0.012	0.882 Max.

## Marking Code

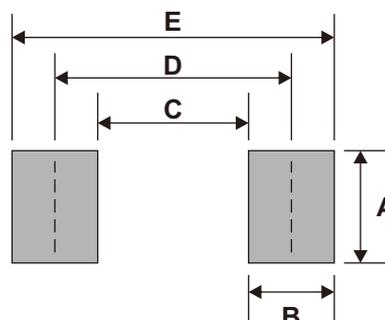
Part Number	Marking Code
CDBC360LR-HF	KL36



█ = Cathode band

## Suggested P.C.B. PAD Layout

SIZE	DO-214AB/SMC	
	(mm)	(inch)
A	3.30	0.130
B	2.50	0.098
C	4.40	0.173
D	6.80	0.268
E	9.40	0.370



## Standard Packaging

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