

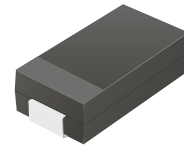
CEFA101-HF thru. CEFA105-HF

Reverse Voltage: 50 to 600 Volts

Forward Current: 1.0 Amp

RoHS Device

Halogen Free

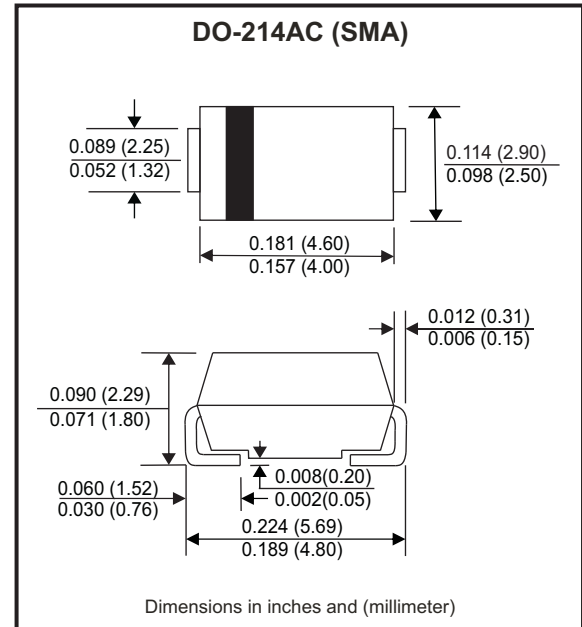


Features

- Glass Passivated chip junction.
- Very low drop down voltage.
- Super fast recovery time for high efficiency.
- Low reverse leakage.
- High surge current capability.

Mechanical data

- Case: SMA/DO-214AC, molded plastic.
- Epoxy: UL 94V-0 rated flame retardant.
- Terminals: Solderable per MIL-STD-750, Method 2026.
- Polarity: Color band denotes cathode end.
- Weight: 0.064 grams(approx.).



Circuit diagram



Maximum Ratings (at TA=25°C unless otherwise noted)

Parameter		Symbol	CEFA 101-HF	CEFA 102-HF	CEFA 103-HF	CEFA 104-HF	CEFA 105-HF	Units
Max. recurrent peak reverse voltage		V _{RRM}	50	100	200	400	600	V
Max. DC blocking voltage		V _{DC}	50	100	200	400	600	V
Max. RMS voltage		V _{RMS}	35	70	140	280	420	V
Max. average forward rectified current (see Fig.1)		I _(AV)	1.0					A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method) T _L =120°C		I _{FSM}	30					A
Max. instantaneous forward voltage @1.0A		V _F	1.0			1.3	1.7	V
Max. DC reverse current at rated DC blocking voltage	T _A =25°C	I _R	5					µA
	T _A =125°C	I _R	100					
Typical reverse recovery time (Note 1)		T _{rr}	35		25	35		nS
Typical junction capacitance (Note 2)		C _J	10					pF
Typical thermal resistance (Note 3)		R _{θJL}	24					°C/W
		R _{θJA}	150					
Operating junction temperature range		T _J	-55 to +150					°C
Storage temperature range		T _{STG}	-55 to +150					°C

Notes: 1. Reverse recovery test condition: $I_F=0.5\text{A}$, $I_R=1.0\text{A}$, $I_{RR}=0.25\text{A}$.
 2. Measured at 1.0MHZ and applied reverse voltage of 4.0 Volts.
 3. Mounted on an FR4 PCB, single sided copper, with 48"cm copper pad area, and mini pad.

Company reserves the right to improve product design , functions and reliability without notice.

REV: A

Rating and Characteristic Curves (CEFA101-HF thru. CEFA105-HF)

Fig.1 - Typical Forward Current Derating Curve

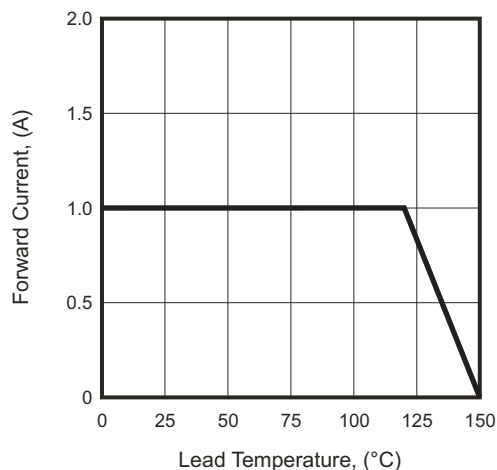


Fig.3 - Maximum Non-repetitive Peak Forward Surge Current

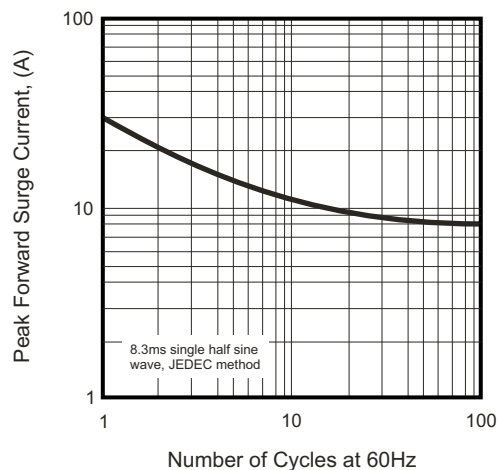


Fig.3 - Typical Instantaneous Forward Characteristics

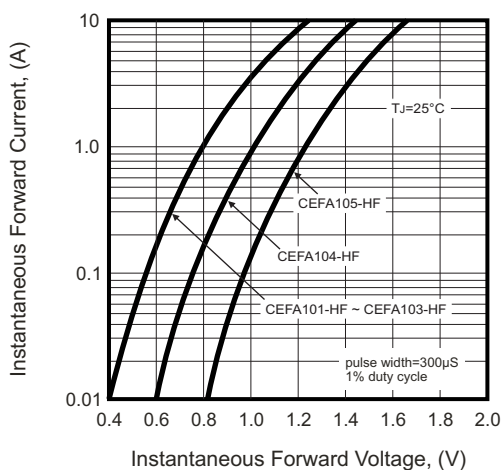


Fig.4 - Typical Reverse Characteristics

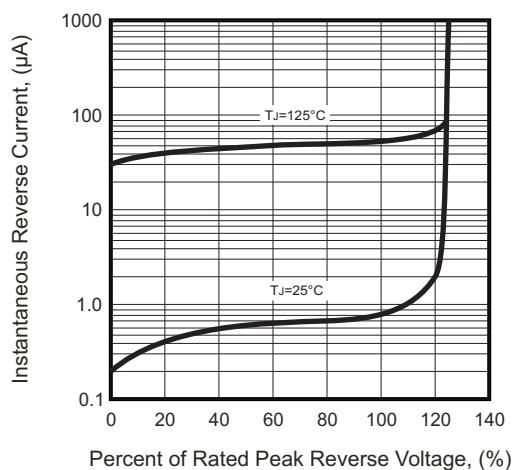
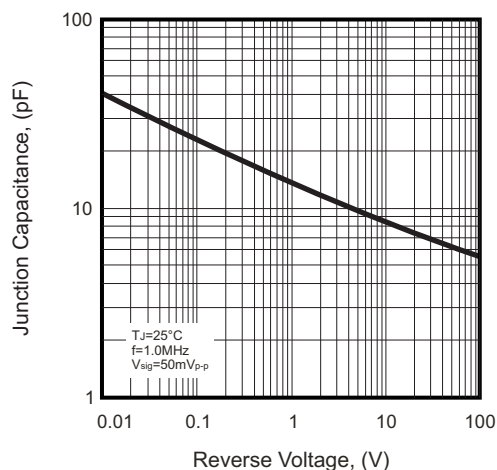
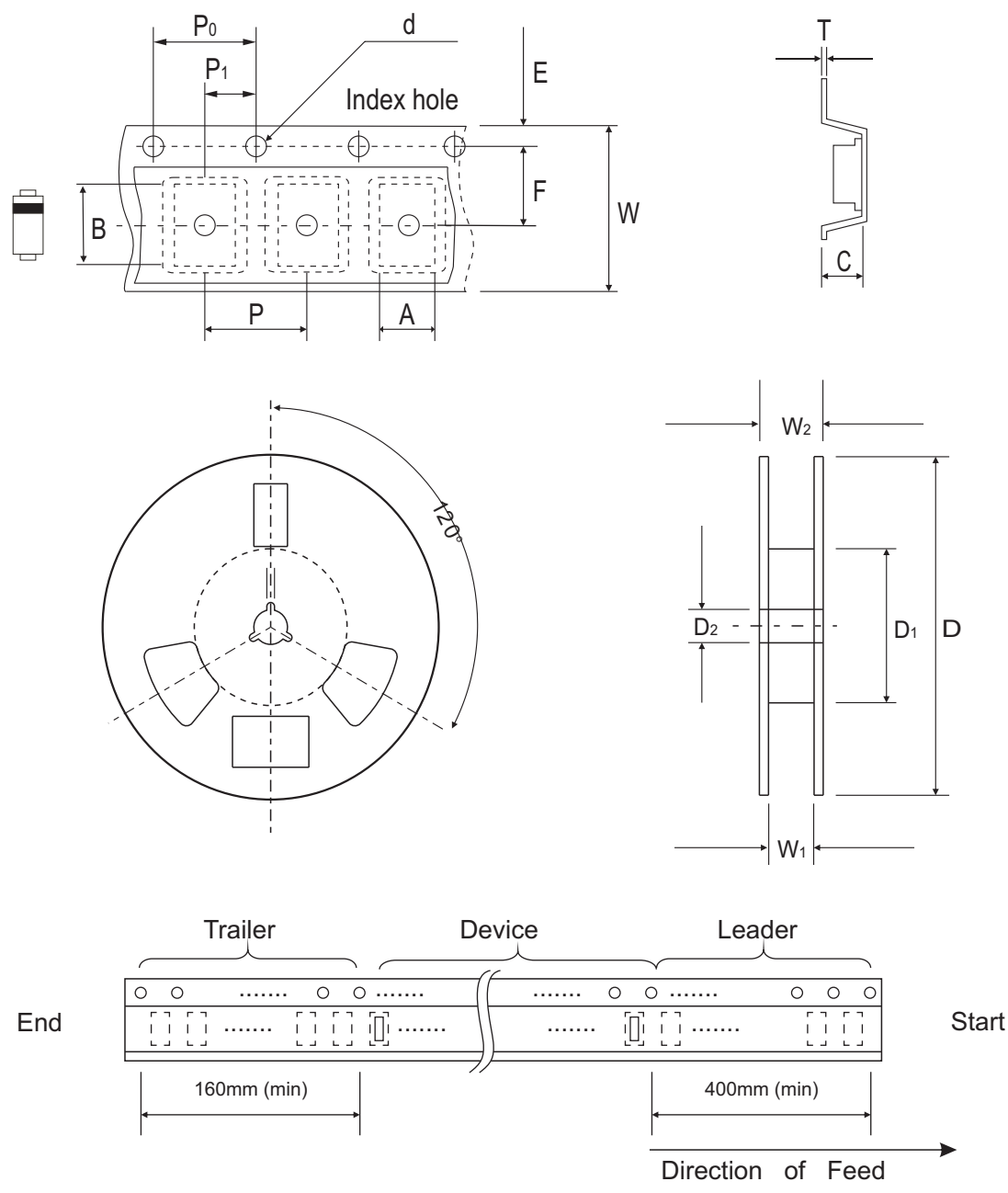


Fig.5 - Typical Junction Capacitance



Reel Taping Specification



DO-214AC (SMA)	SYMBOL	A	B	C	d	T	D	D ₁	D ₂
	(mm)	3.10	5.90	2.36	1.55	0.25	330.0	54.00	13.50
	(inch)	0.122	0.232	0.093	0.061	0.010	13.00	2.126	0.531

DO-214AC (SMA)	SYMBOL	E	F	P	P ₀	P ₁	W	W ₁	W ₂
	(mm)	1.75	5.50	4.00	4.00	2.00	12.00	13.50	18.40
	(inch)	0.069	0.217	0.157	0.157	0.079	0.472	0.531	0.724

Note: The tolerance of carrier tape and top cover is 0.2mm, the tolerance of reel is 2mm.

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Marking Code

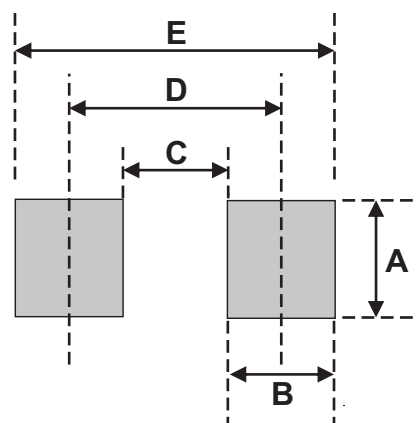
Part Number	Marking Code
CEFA101-HF	ES1A
CEFA102-HF	ES1B
CEFA103-HF	ES1D
CEFA104-HF	ES1G
CEFA105-HF	ES1J



XXXX = Product type marking code

Suggested PAD Layout

SIZE	DO-214AC (SMA)	
	(mm)	(inch)
A	1.70	0.067
B	2.50	0.098
C	1.50	0.059
D	4.10	0.161
E	6.60	0.260



Note:

1.The pad layout is for reference purposes only.

Standard Packaging

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