

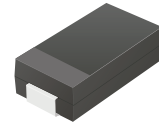
CDBA5819-HF

Reverse Voltage: 40 Volts

Forward Current: 1A

RoHS Device

Halogen Free



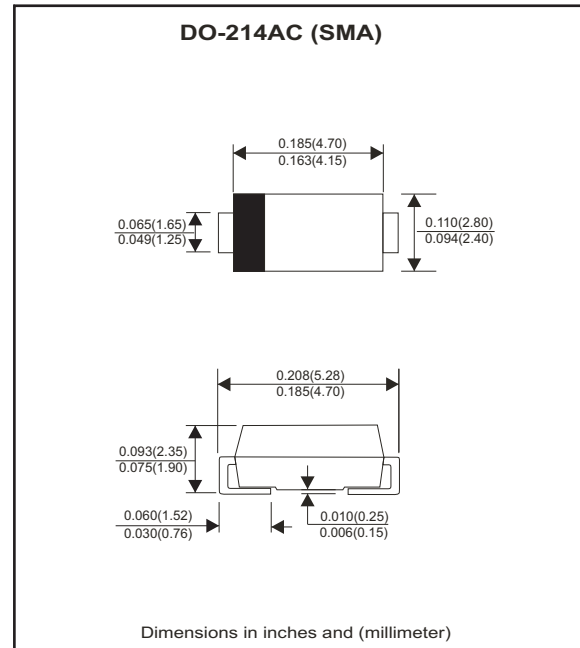
Features

- 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.
- Weight: 0.064 grams(Approx.).

Circuit diagram



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

Parameter	Symbol	Value	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	40	V
Maximum DC bolcking voltage	V_{DC}	40	V
Maximum RMS voltage	V_{RMS}	28	V
Peak surge forward current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	20	A
Maximum Average forward current	I_O	1	A
Thermal resistance from junction to ambience	$R_{\theta JA}$	55	°C/W
Operating junction temperature range	T_j	-55 to +125	°C
Storage temperature range	T_{STG}	-55 to +125	°C

Electrical Characteristics (at TA=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Max. Forward voltage at 1.0 A (Note 1)	V_F	0.55	V
Max. DC reverse current at rated DC blocking voltage	I_R	0.5 20	mA
		$T_a = 25^\circ\text{C}$ $T_a = 100^\circ\text{C}$	

Note 1: Pulse test:300μs pulse width, 1% duty cycle.

RATING AND CHARACTERISTIC CURVES (CDBA5819-HF)

Fig.1 - Typical Forward Characteristics

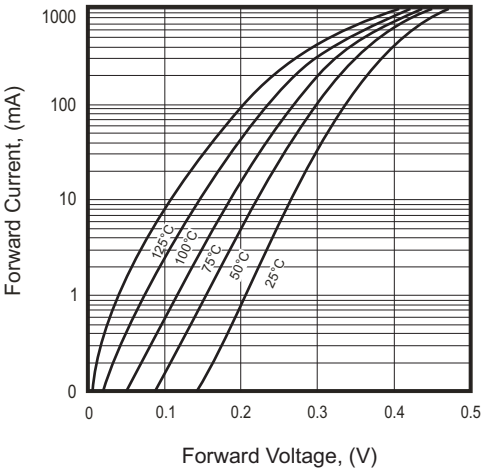


Fig.2 - Typical Reverse characteristics

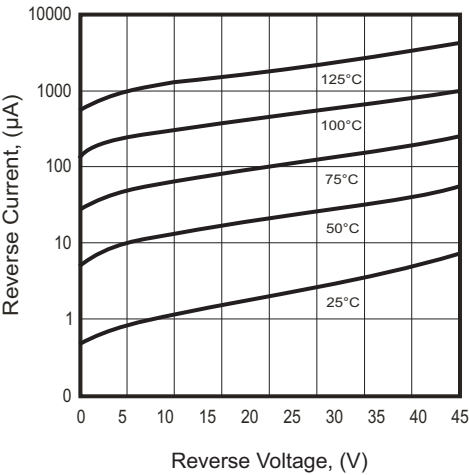


Fig.3 - Current Derating Curve

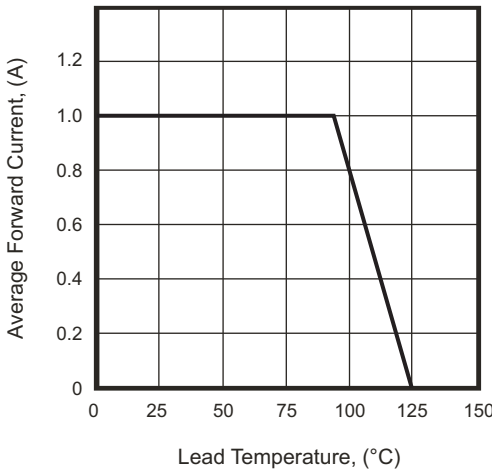
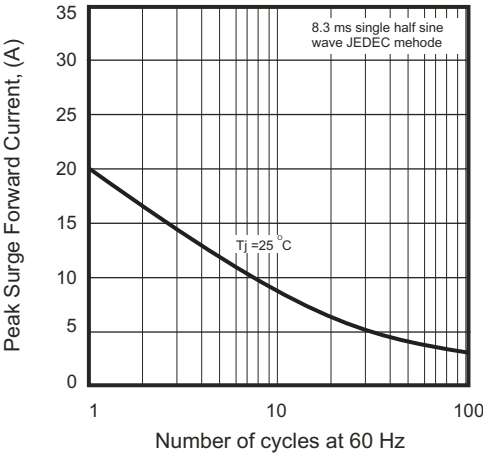
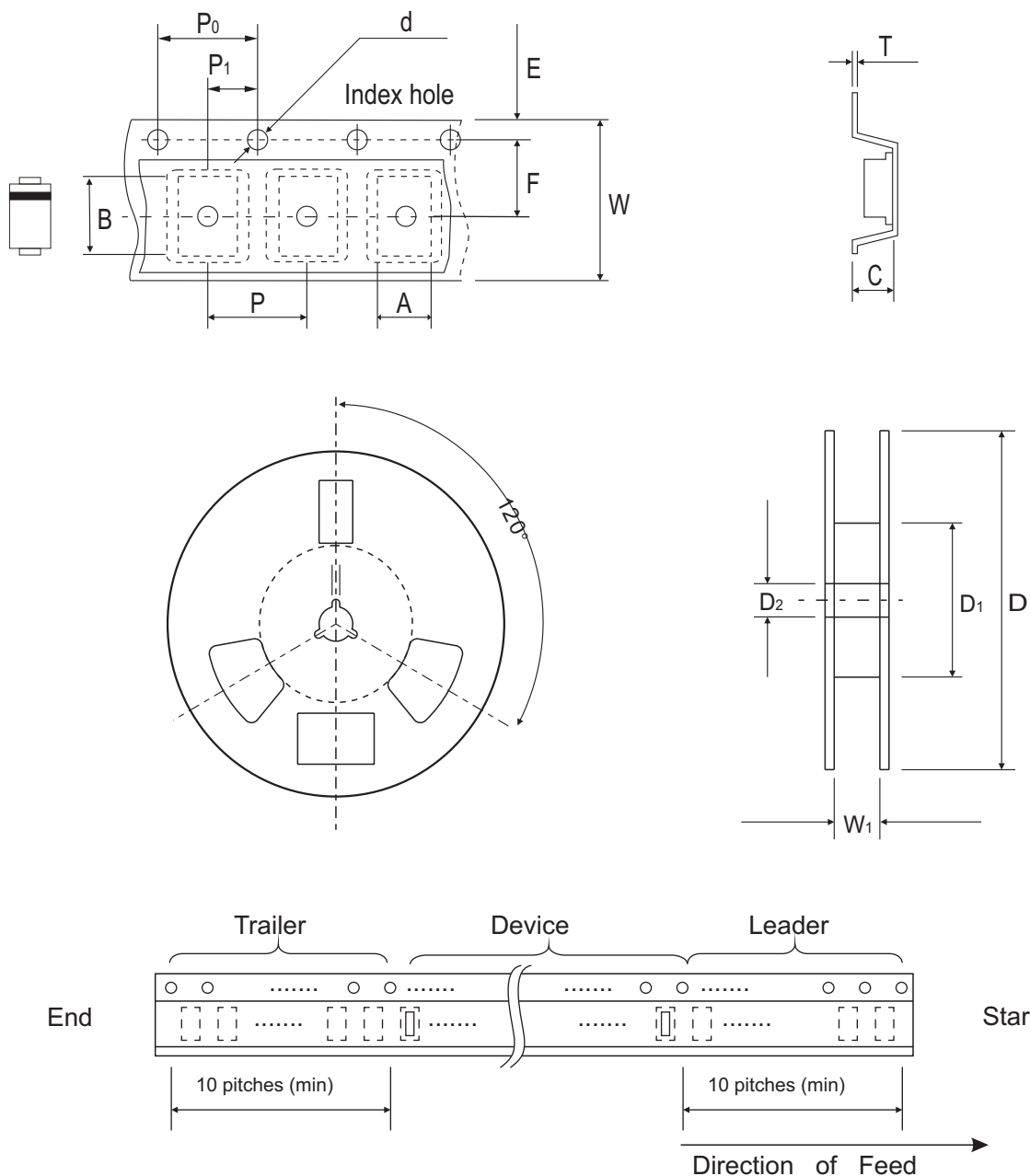


Fig.4 - Non Repetitive Peak Forward Surge Current



Reel Taping Specification

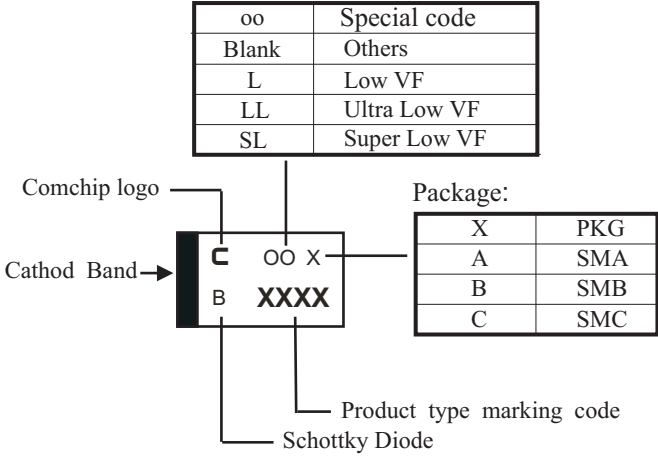


SMA (DO-214AC)	SYMBOL	A	B	C	d	D	D ₁	D ₂
	(mm)	2.60 ± 0.15	5.18 ± 0.17	2.36 ± 0.10	1.50 ± 0.10	330 ± 1.50	75.00 ± 1.00	13.50 ± 0.50
	(inch)	0.102 ± 0.006	0.204 ± 0.007	0.093 ± 0.004	0.059 ± 0.004	12.992 ± 0.060	2.953 ± 0.040	0.531 ± 0.020

SMA (DO-214AC)	SYMBOL	E	F	P	P ₀	P ₁	W	W ₁
	(mm)	1.75 ± 0.10	5.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	12.00 ± 0.200	13.50 ± 0.50
	(inch)	0.069 ± 0.004	0.217 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.472 ± 0.008	0.531 ± 0.020

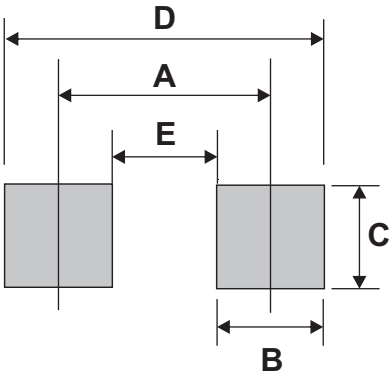
Marking Code

Part Number	Marking Code
CDBA5819-HF	5819



Suggested PAD Layout

SIZE	DO-214AC (SMA)	
	(mm)	(inch)
A	4.00	0.157
B	2.50	0.098
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