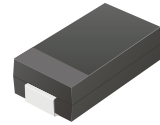


## CDBA5819-G

Reverse Voltage: 40 Volts

Forward Current: 1A

RoHS Device

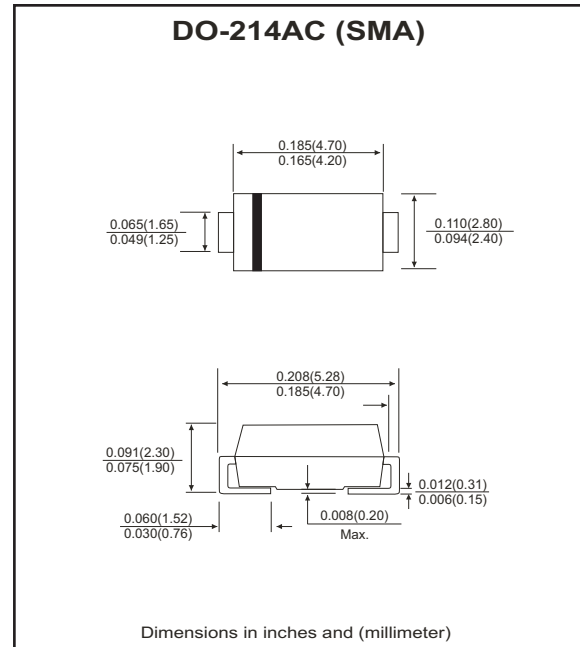


### Features

- Ideal for surface mount applications.
- Low power losses, high efficiency.
- High temperature soldering:  
260°C/10 seconds at terminals.
- High surge capability.
- Low forward voltage drop.

### Mechanical data

- Case: JEDEC DO-214AC, molded plastic.
- Terminals: Solder plated, solderable per,  
J-STD-002B and JESD22-B102D.
- Polarity: Laser band denotes cathode end.
- Approx. weight: 0.064 grams



### Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Parameter	Symbol	CDBA5819-G	Unit
Maximum repetitive peak reverse voltage	$V_{RRM}$	40	V
Maximum RMS voltage	$V_{RMS}$	28	V
Maximum DC blocking voltage	$V_{DC}$	40	V
Maximum average forward rectified current	$I_{F(AV)}$	1.0	A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	$I_{FSM}$	40	A
Max. instantaneous forward voltage at 1.0A	$V_F$	0.55	V
Maximum DC reverse current at Rated DC blocking voltage	$I_R$	0.5 5	mA
			$T_A=25^\circ\text{C}$ $T_A=100^\circ\text{C}$
Thermal resistance from junction to Lead (Note 1)	$R_{\theta JA}$	32	°C/W
Operating temperature range	$T_J$	-65 ~ +125	°C
Storage temperature range	$T_{STG}$	-65 ~ +125	°C

**NOTES:**

- Units mounted on P.C.B. 5.0×5.0 mm (0.013 mm thick) land areas.
- Company reserves the right to improve product design, functions and reliability without notice.

## RATING AND CHARACTERISTIC CURVES (CDBA5819-G)

Fig.1 - Forward Current derating curve

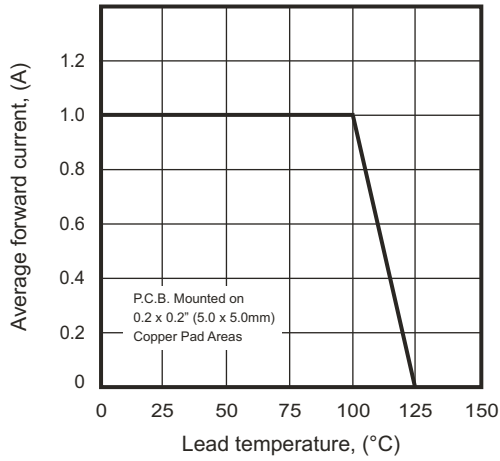


Fig.2 - Maximum Non-repetitive Peak Forward Surge Current

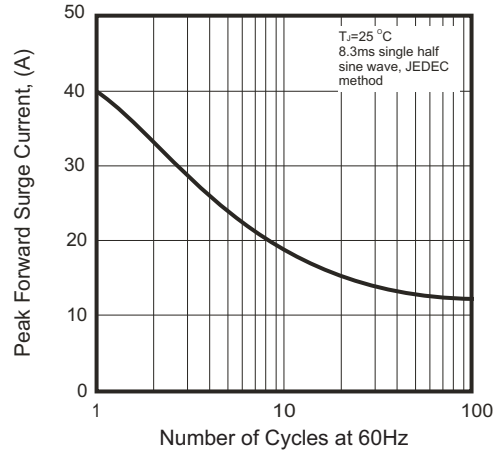


Fig.3 - Typical Instantaneous Forward Characteristics

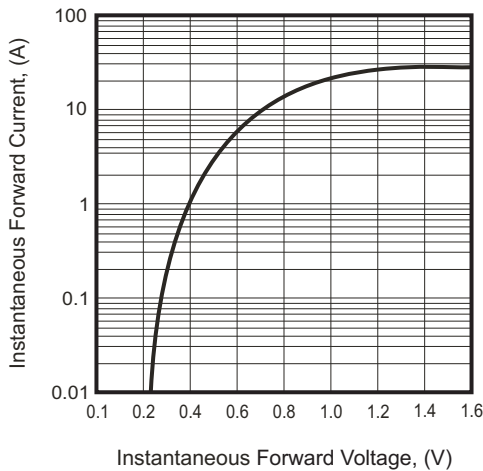
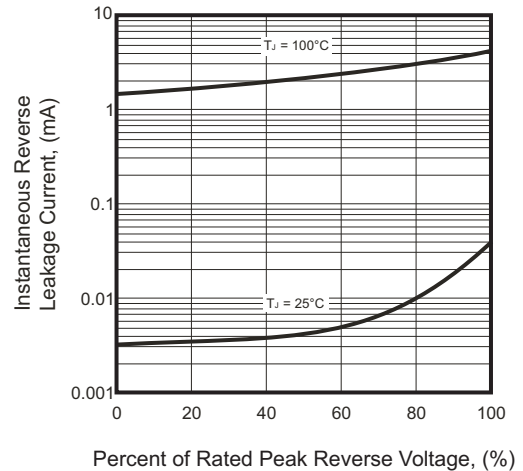
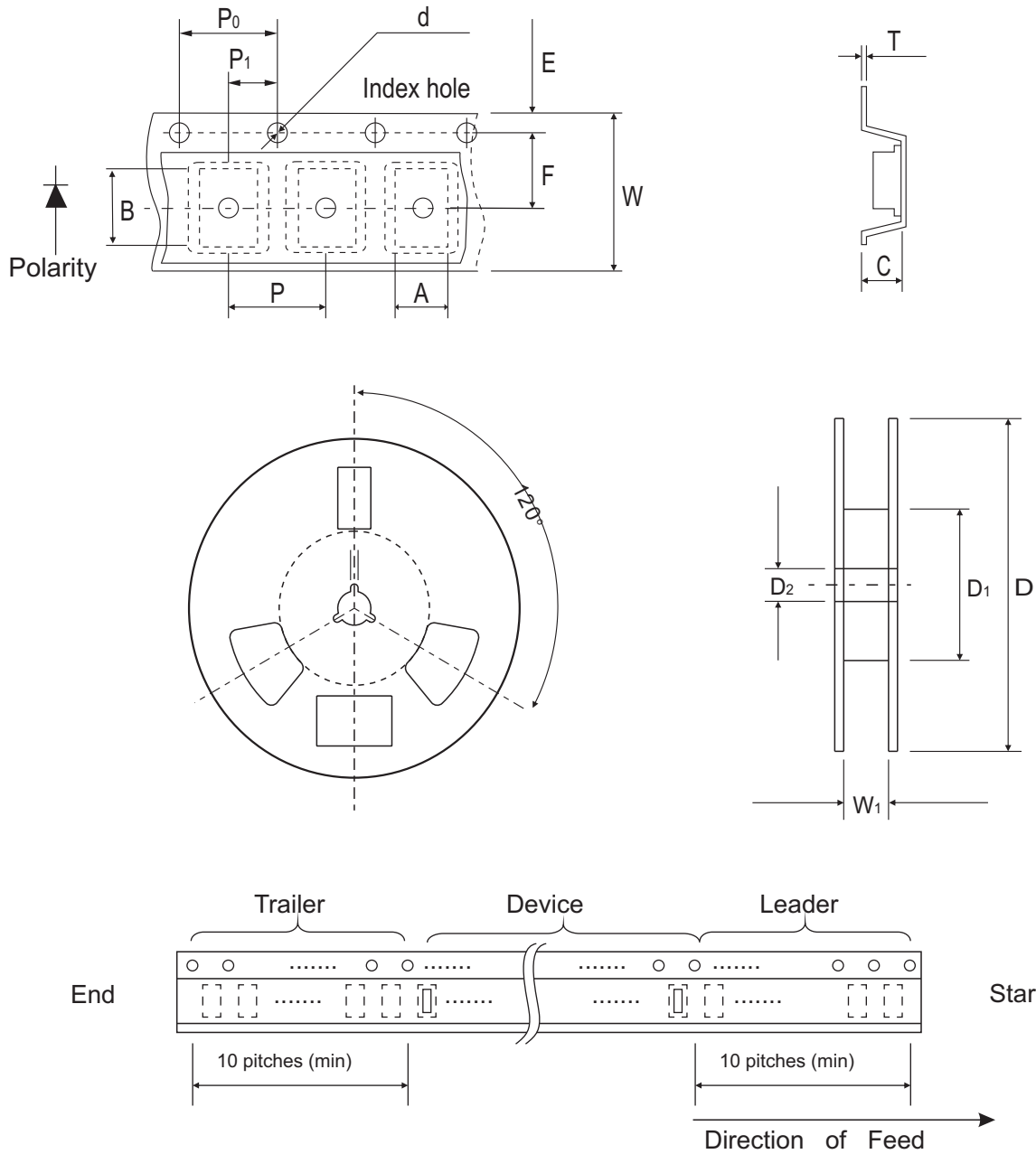


Fig.5 - Typical Reverse Leakage Characteristics



## Reel Taping Specification

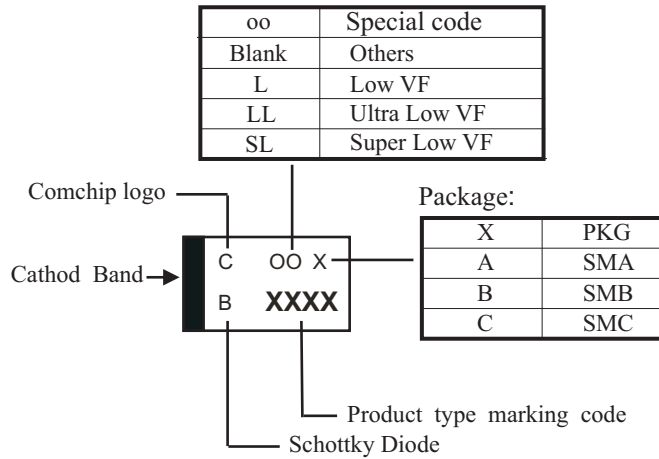


SMA (DO-214AC)	SYMBOL	A	B	C	d	D	D <sub>1</sub>	D <sub>2</sub>
	(mm)	2.60 ± 0.15	5.18 ± 0.17	2.36 ± 0.10	1.50 ± 0.10	330 ± 1.50	75.0 ± 1.00	13.5 ± 0.50
	(inch)	0.102 ± 0.006	0.204 ± 0.007	0.093 ± 0.004	0.059 ± 0.004	12.992 ± 0.060	2.953 ± 0.040	0.531 ± 0.020

SMA (DO-214AC)	SYMBOL	E	F	P	P <sub>0</sub>	P <sub>1</sub>	W	W <sub>1</sub>
	(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	13.5 ± 0.50
	(inch)	0.689 ± 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

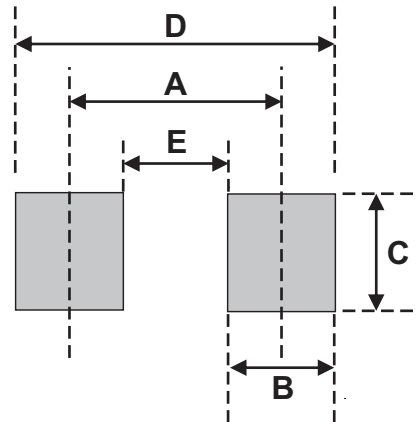
Part Number	Marking Code
CDBA5819-G	5819



**xxxx = Product type marking code**

## Suggested PAD Layout

SIZE	DO-214AC(SMA)	
	(mm)	(inch)
A	3.80	0.150
B	1.60	0.063
C	2.80	0.110
D	5.40	0.213
E	2.20	0.087



## Standard Packaging

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