



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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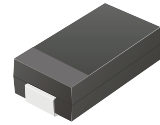


CDBA5819-G

Reverse Voltage: 40 Volts

Forward Current: 1A

RoHS Device

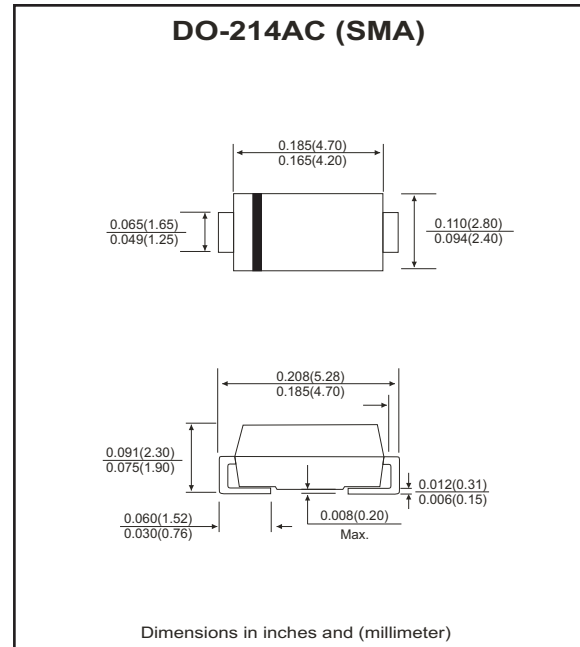


Features

- 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
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

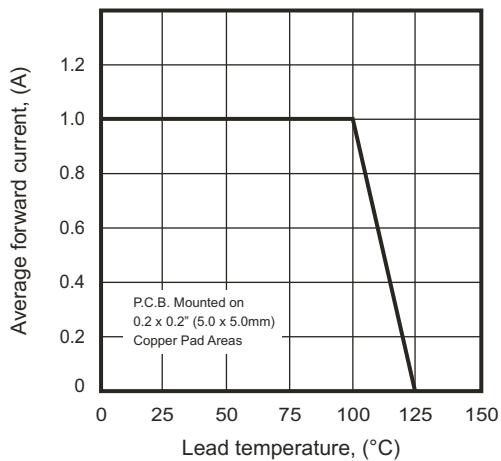


Fig.2 - Maximum Non-repetitive Peak Forward Surge Current

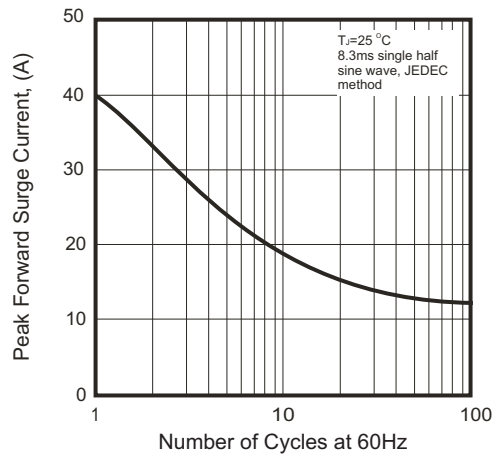


Fig.3 - Typical Instantaneous Forward Characteristics

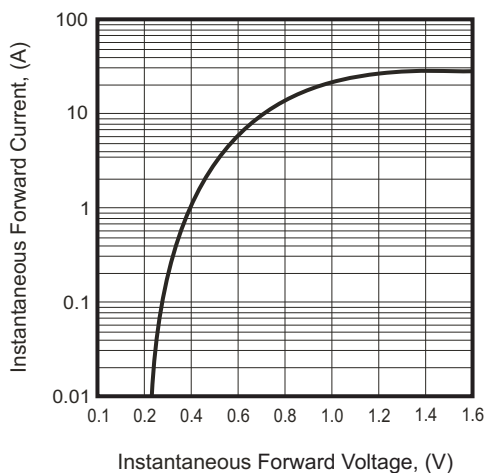
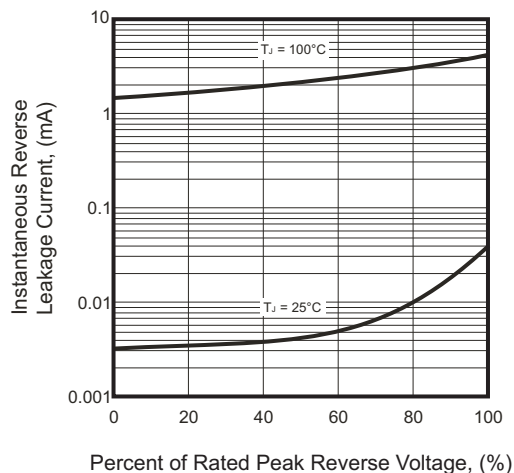
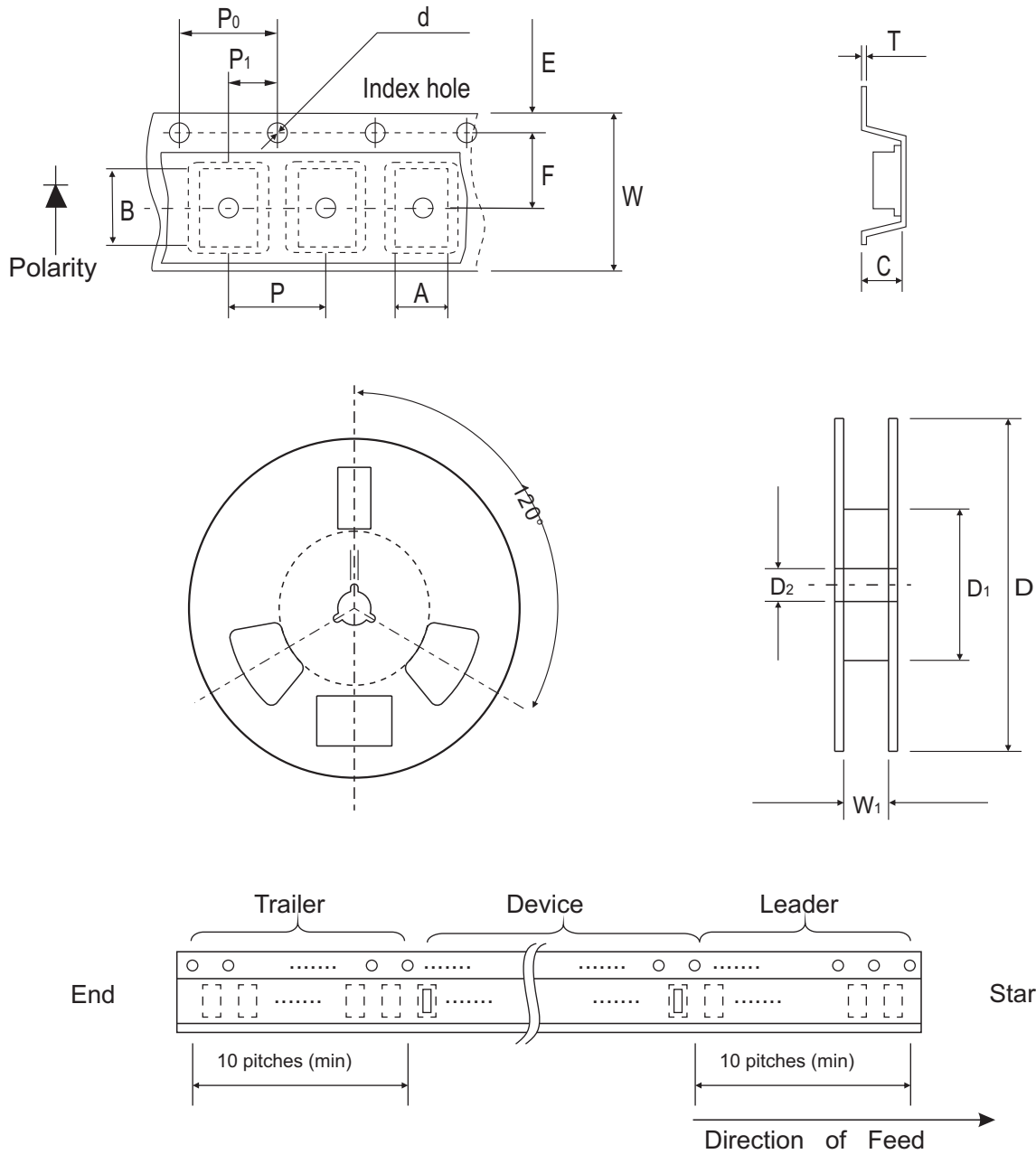


Fig.5 - Typical Reverse Leakage Characteristics



Reel Taping Specification

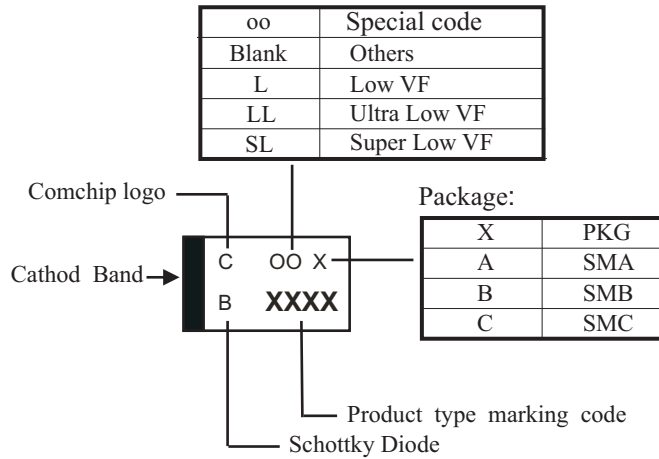


SMA (DO-214AC)	SYMBOL	A	B	C	d	D	D ₁	D ₂
	(mm)	2.60 ± 0.15	5.18 ± 0.17	2.36 ± 0.10	1.50 ± 0.10	330 ± 1.50	75.0 ± 1.00	13.5 ± 0.50
	(inch)	0.102 ± 0.006	0.204 ± 0.007	0.093 ± 0.004	0.059 ± 0.004	12.992 ± 0.060	2.953 ± 0.040	0.531 ± 0.020

SMA (DO-214AC)	SYMBOL	E	F	P	P 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	13.5 ± 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

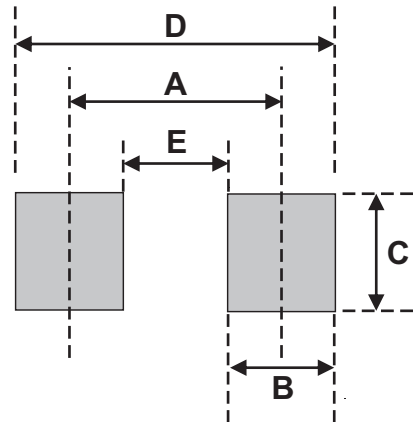
Part Number	Marking Code
CDBA5819-G	5819



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