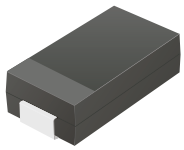
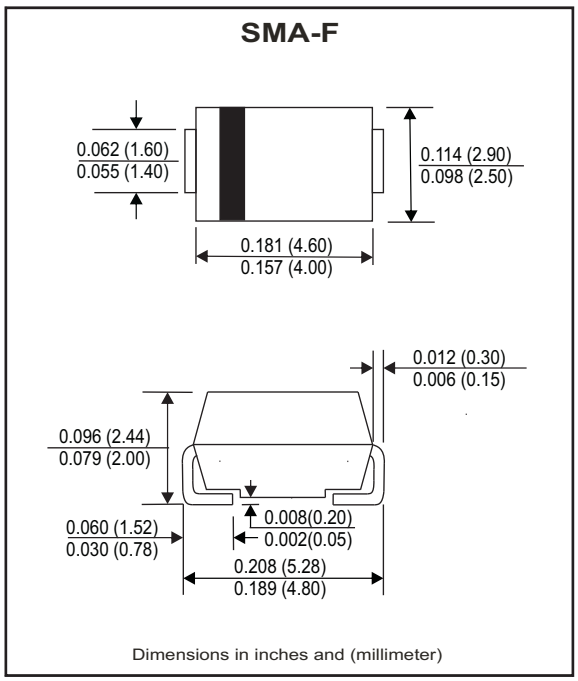
CDBA120SL-G

Reverse Voltage: 20 Volts
Forward Current: 1.0 Amp
RoHS Device





Features

-Low Profile surface mount applications in order to optimize board space.

-Low power loss, high efficiency.

-High current capability, low forward voltage drop.

-High surge capability.

-Guardring for overvoltage protection.

-Ultra high-speed switching.

-Silicon epitaxial planar chip,metal silicon junction.

Mechanical data

-Epoxy: UL94-V0 rate flame retardant.

-Case: Molded plastic, DO-214AC / SMA-F

-Terminals: Solder plated, solderable per MIL-STD-750, method 2026.

-Polarity: Indicated by cathode band.

-Weight: 0.064 grams (Approx.)

Circuit Diagram



Maximum Ratings and Electrical Characteristics

Ratings at Ta=25°C unless otherwise noted.
Single phase, half wave, 60Hz, resistive or inductive loaded.
For capacitive load, derate current by 20% .

Parameter	Symbol	CDBA120SL-G	Units
Max. Repetitive peak reverse voltage	V_{RRM}	20	V
Max. RMS voltage	V_{RMS}	14	V
Max. Continuous reverse voltage	V_R	20	V
Max. Forward voltage @I_F=1.0A	V_F	0.31	V
Operating Temperature	T_J	-55 to +100	°C

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	Units
Forward rectified current	See Fig.1	I_O			1.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}			30	A
Reverse current	V_R =V_{RRM} T_A=25°C	I_R			1.0	mA
	V_R =V_{RRM} T_A=100°C	I_R			20	mA
Thermal resistance	Junction to ambient	$R_{\theta JA}$		70		°C/W
Diode junction capacitance	f=1MHz and applied 4V DC reverse Voltage	C_J		160		pF
Storage temperature		T_{STG}	-55		+150	°C

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

RATING AND CHARACTERISTIC CURVES (CDBA120SL-G)

Fig.1 - Typical Forward Current Derating Curve

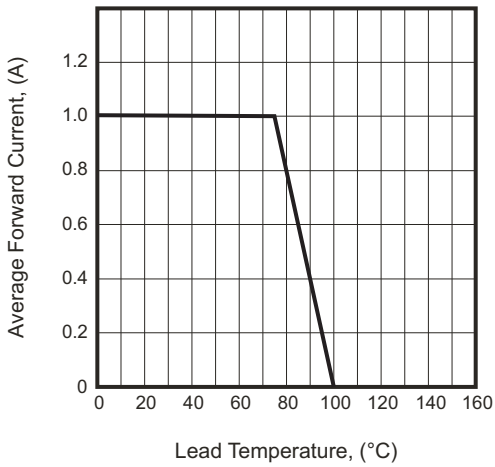


Fig.2 - Typical Forward Characteristics

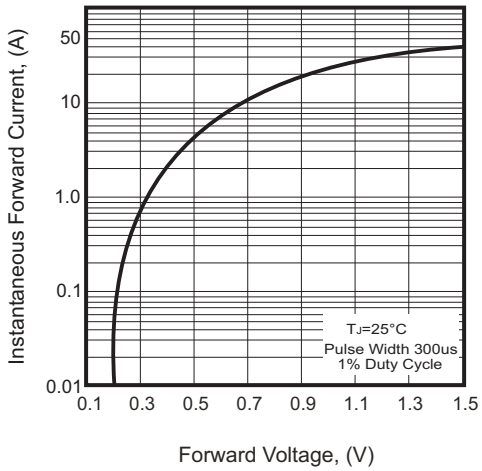


Fig.3 - Maximum Non-repetitive Forward Surge Current

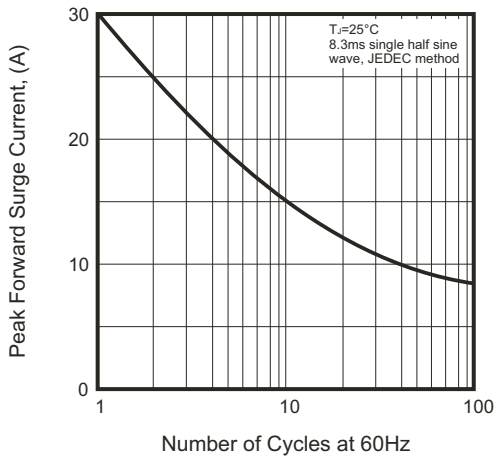


Fig.4 - Typical Junction Capacitance

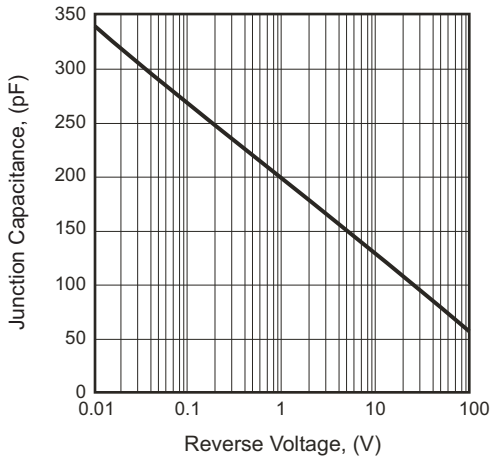
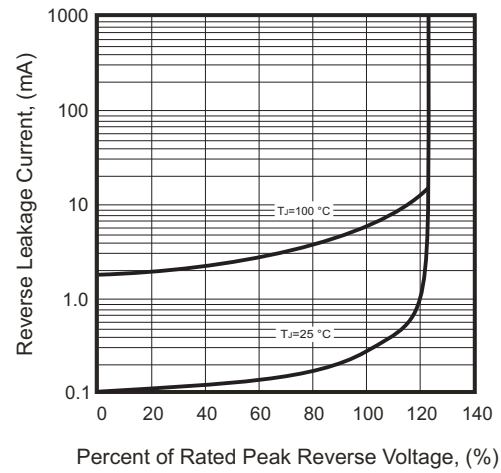
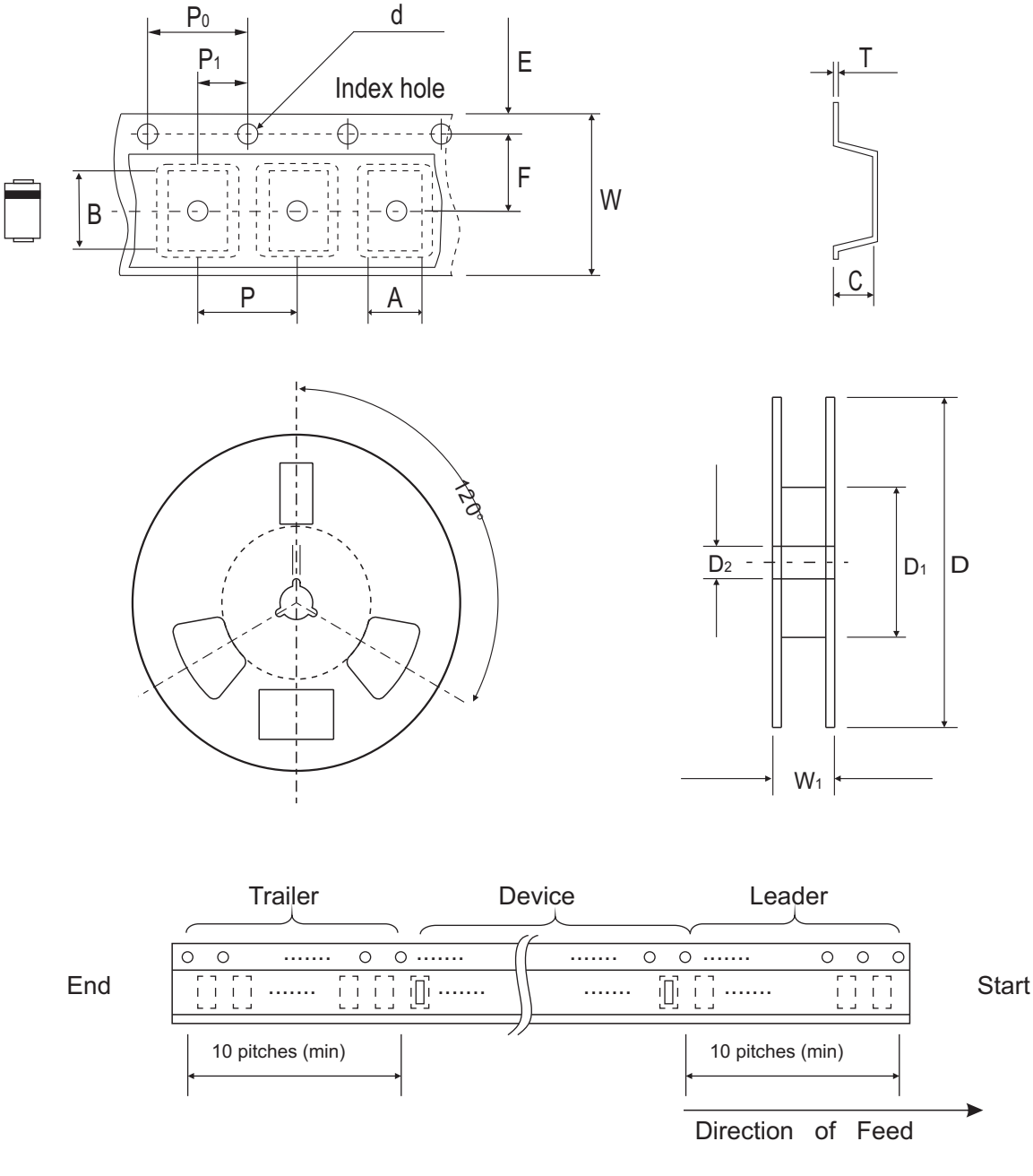


Fig.5 - Typical Reverse Characteristics



Reel Taping Specification



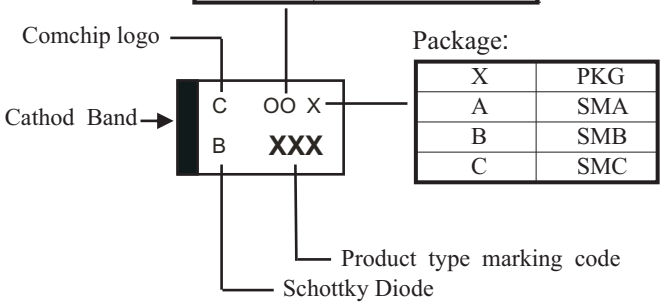
	SYMBOL	A	B	C	d	D	D_1	D_2
SMA-F	(mm)	2.72 ± 0.10	5.25 ± 0.10	2.36 ± 0.10	1.50 ± 0.10	330 ± 2.00	50.0 MIN.	13.00 ± 0.50
	(inch)	0.107 ± 0.004	0.207 ± 0.004	0.093 ± 0.004	0.059 ± 0.004	12.992 ± 0.079	1.969 MIN.	0.519 ± 0.020

	SYMBOL	E	F	P	P_0	P_1	T	W	W_1
SMA-F	(mm)	1.75 ± 0.10	5.50 ± 0.10	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	0.23 ± 0.10	12.00 ± 0.30	18.00 ± 1.00
	(inch)	0.069 ± 0.004	0.217 ± 0.004	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.009 ± 0.004	0.472 ± 0.012	0.709 ± 0.039

Marking Code

Part Number	Marking Code
CDBA120SL-G	120

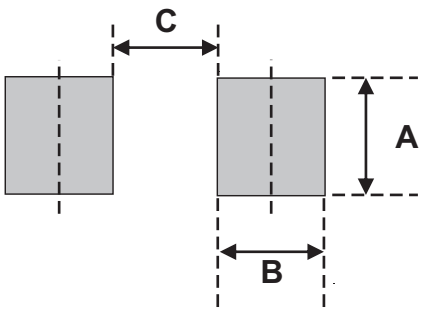
oo	Special code
Blank	Others
L	Low VF
LL	Ultra Low VF
SL	Super Low VF



xxx = Product type marking code

Suggested PAD Layout

SIZE	DO-214AC(SMA-F)	
	(mm)	(inch)
A	1.70	0.067
B	2.60	0.102
C	1.50	0.060



Standard Packaging

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