

CDBZ310100LL-HF

Reverse Voltage: 100 Volts

Forward Current: 10 Amp

RoHS Device

Halogen free



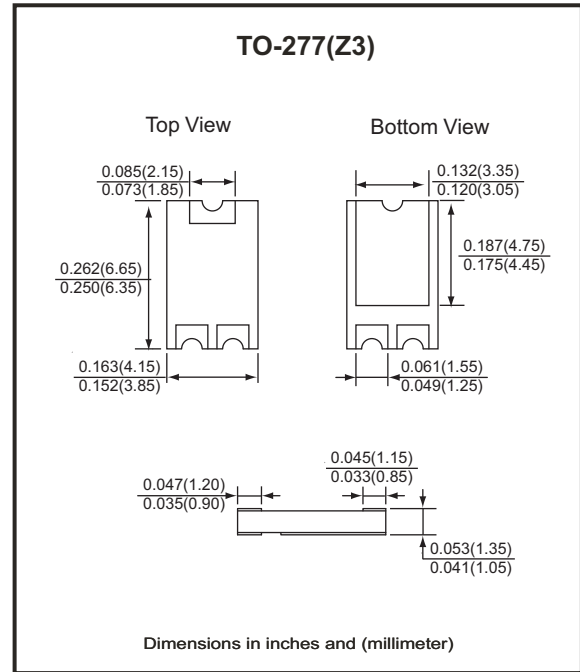
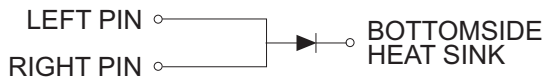
Features

- Lead less chip form, no lead damage.
- Low power loss, High efficiency.
- High current capability, low VF.
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0 .

Mechanical data

- Case: Packed with FRP substrate and epoxy underfilled.
- Terminals: Pure Tin plated (Lead-Free), solderable per MIL-STD-750, method 2026.

Circuit Diagram



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

Parameter	Symbol	Rating	Unit
Repetitive peak reverse voltage	VRRM	100	V
Average forward current	IF(AV)	10	A
Peak forward surge current (8.3ms single half sine-wave)	IFSM	180	A
Operating and storage temperature range	TJ, TSTG	-55 to +150	°C

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

Parameter	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	VF	@ IF = 5 A TA= 25°C TA= 125°C	- -	0.515 0.455	- -	V
		@ IF = 10 A TA= 25°C TA= 125°C	- -	0.63 0.57	0.68 0.62	V
Repetitive peak reverse current	IR	@ VR = 70 V TA= 25°C TA= 125°C	- -	0.01 6	- -	mA
		@ VR = Max. VRRM TA= 25°C TA= 125°C	- -	0.03 -	0.15 30	mA
Junction capacitance	CJ	VR = 4V, f = 1.0 MHz	-	1100	-	pF
Thermal resistance	RθJA	Junction to ambient (NOTE)	-	105.5	-	°C/W
	RθJC	Junction to case (NOTE)	-	3.9	-	°C/W

NOTES : Mounted on P.C.B. with 3.36 x 14.86mm & 1.39 x 1.40mm copper pad areas.

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

REV:A

RATING AND CHARACTERISTIC CURVES (CDBZ310100LL-HF)

Fig.1 - Typical Forward Current Derating Curve

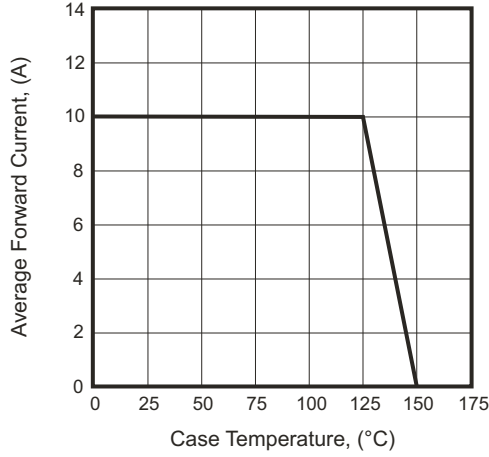


Fig.2 - Typical Instantaneous Forward Characteristics

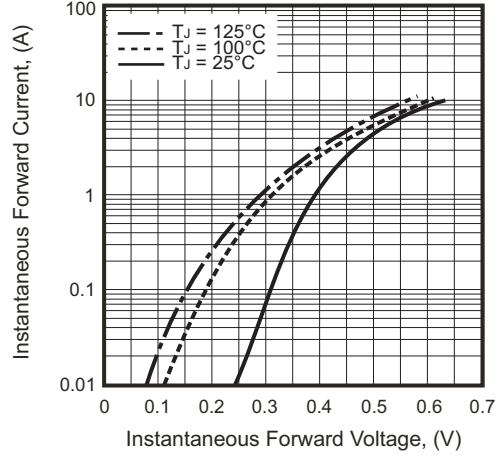


Fig.3 - Max. Non-repetitive Peak Forward Surge Current

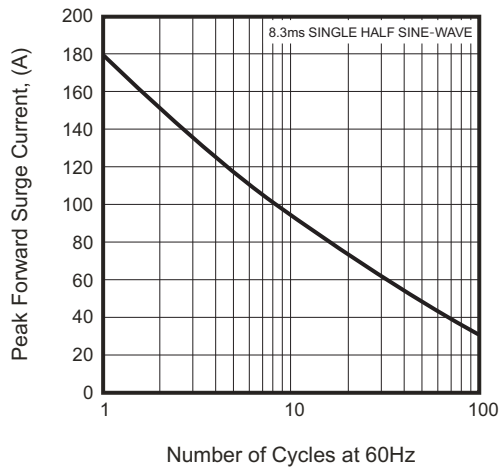
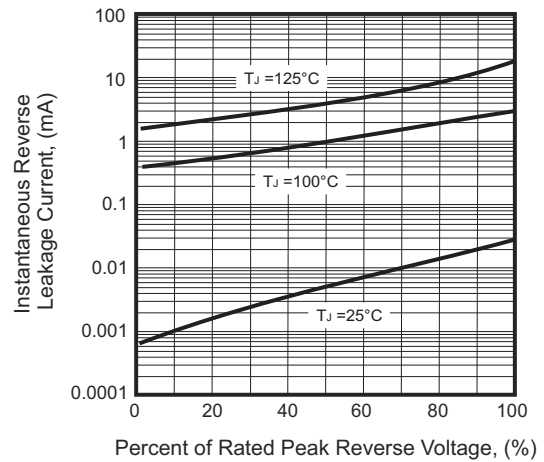
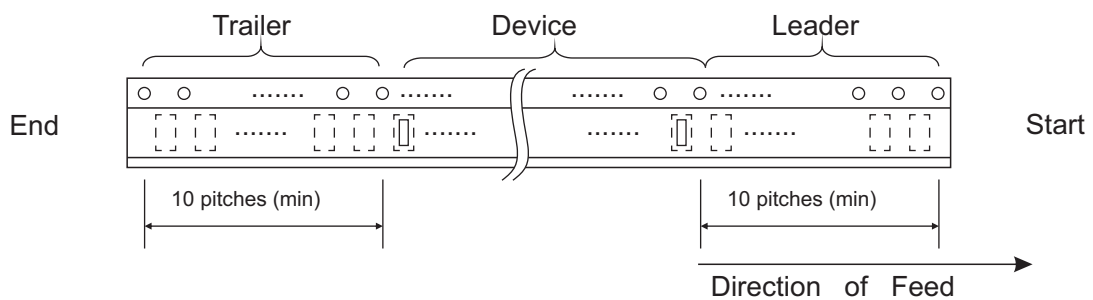
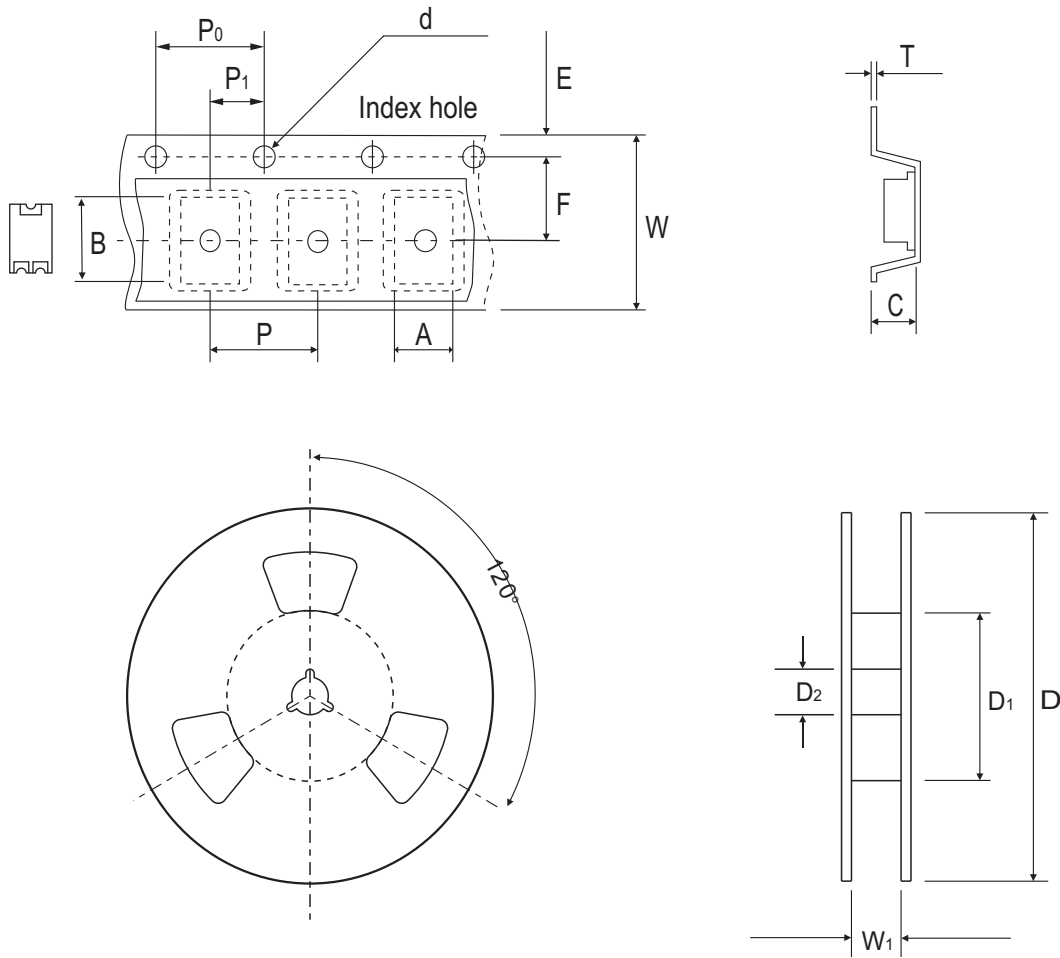


Fig.4 - Typical Reverse Characteristics



Reel Taping Specification



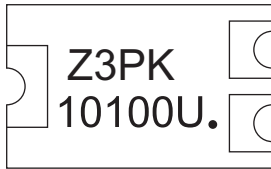
TO-277(Z3)	SYMBOL	A	B	C	d	D	D ₁	D ₂
	(mm)	4.25 ± 0.10	6.80 ± 0.10	1.45 ± 0.10	1.50 ± 0.10	330 ± 2.00	50.0 MIN.	13.0 ± 0.50
	(inch)	0.167 ± 0.004	0.268 ± 0.004	0.057 ± 0.004	0.059 ± 0.004	12.992 ± 0.079	1.969 MIN.	0.512 ± 0.020

TO-277(Z3)	SYMBOL	E	F	P	P ₀	P ₁	W	W ₁
	(mm)	1.75 ± 0.10	5.50 ± 0.05	8.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	12.00 ± 0.30	14.4 MAX.
	(inch)	0.069 ± 0.004	0.217 ± 0.002	0.315 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.472 ± 0.012	0.567 MAX.

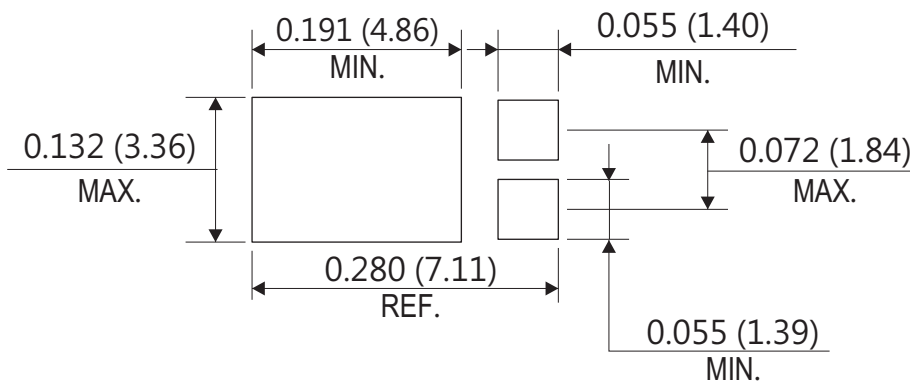
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Marking Code



Suggested PAD Layout



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
TO-277(Z3)	5,000	13