

CDBZ31060-HF

Reverse Voltage: 60 Volts

Forward Current: 10 Amp

RoHS Device

Halogen free



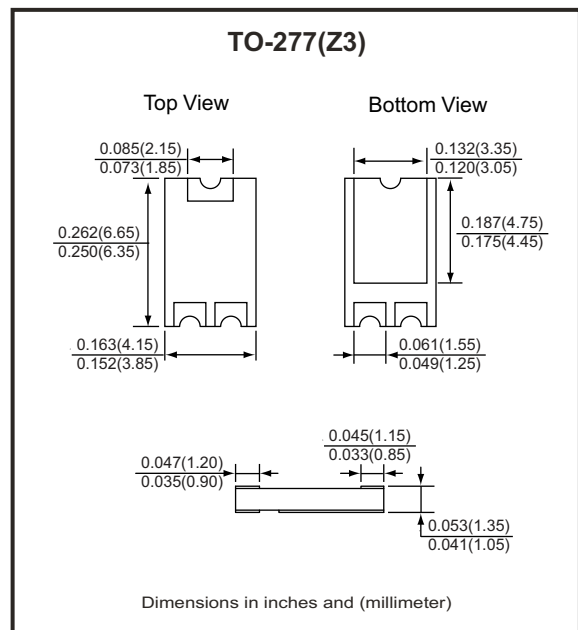
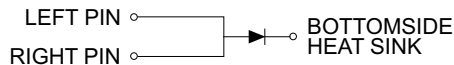
Features

- 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.
- Weight: 0.08 grams (approx).

Circuit Diagram



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

Parameter	Symbol	Rating	Unit
Repetitive peak reverse voltage	VRRM	60	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 (NOTE 1)	VF	IF = 10 A	-	0.67	0.75	V
Repetitive peak reverse current	IRRM	VR = Max. VRRM TA= 25°C TA= 125°C	- -	0.01 -	0.10 15	mA
Thermal resistance	RθJA	Junction to ambient (NOTE 2)	-	60	-	°C/W
	RθJL	Junction to lead (NOTE 2)	-	22	-	°C/W
	RθJC	Junction to case (NOTE 2)	-	20	-	°C/W

NOTES : (1) Pulse test width PW=300usec , 1% duty cycle.
 (2) Mounted on P.C.B. with 14 x 14mm copper pad areas.

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

RATING AND CHARACTERISTIC CURVES (CDBZ31060-HF)

Fig.1 - Forward Current Derating Curve

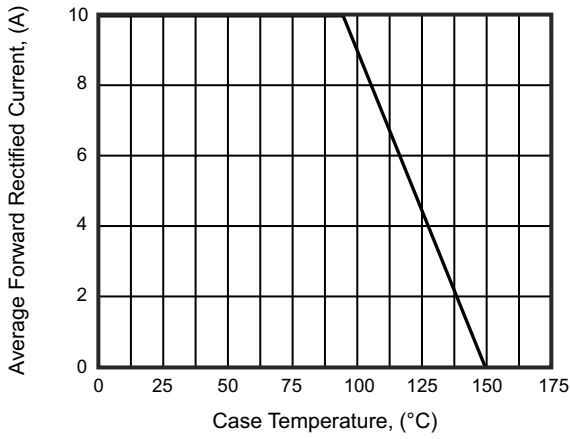


Fig.2 - Maximum Non-Repetitive Peak Forward Surge Current

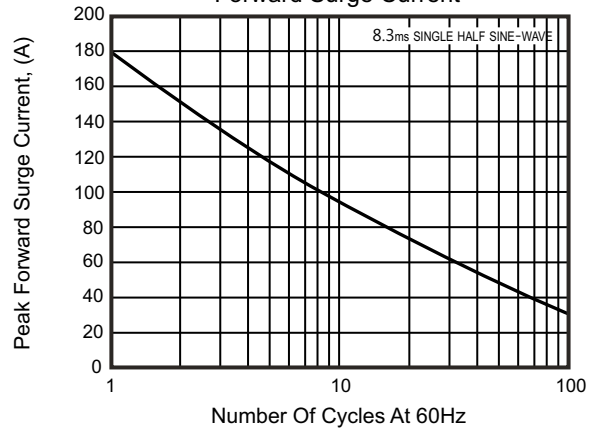


Fig.3 - Typical Instantaneous Forward Characteristics

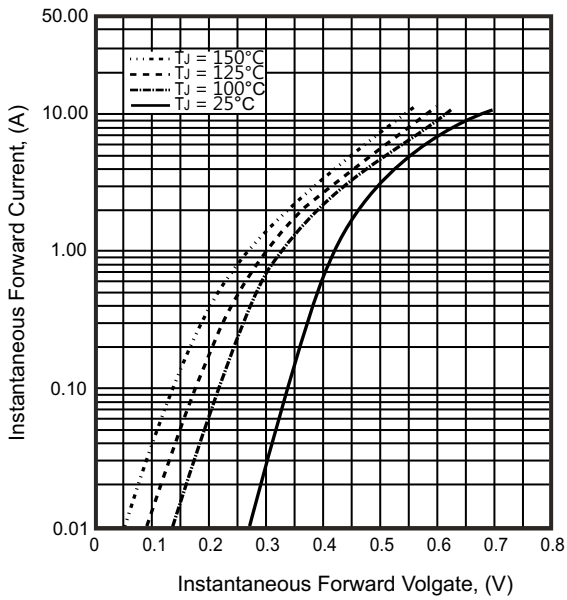
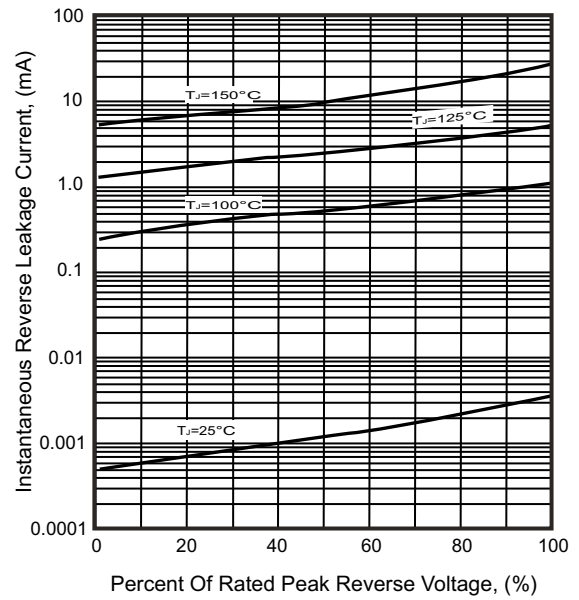
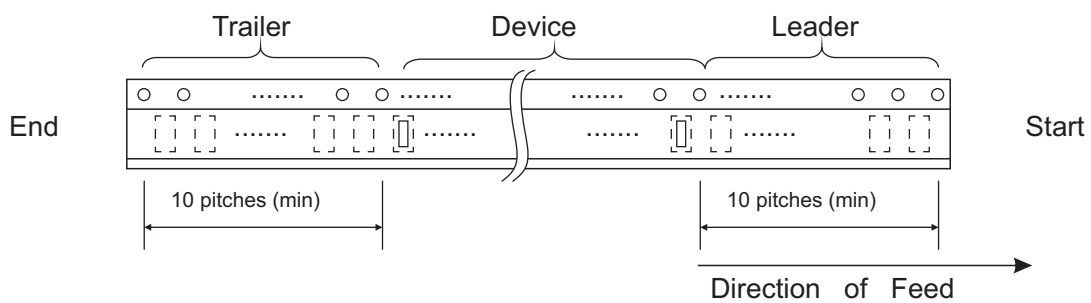
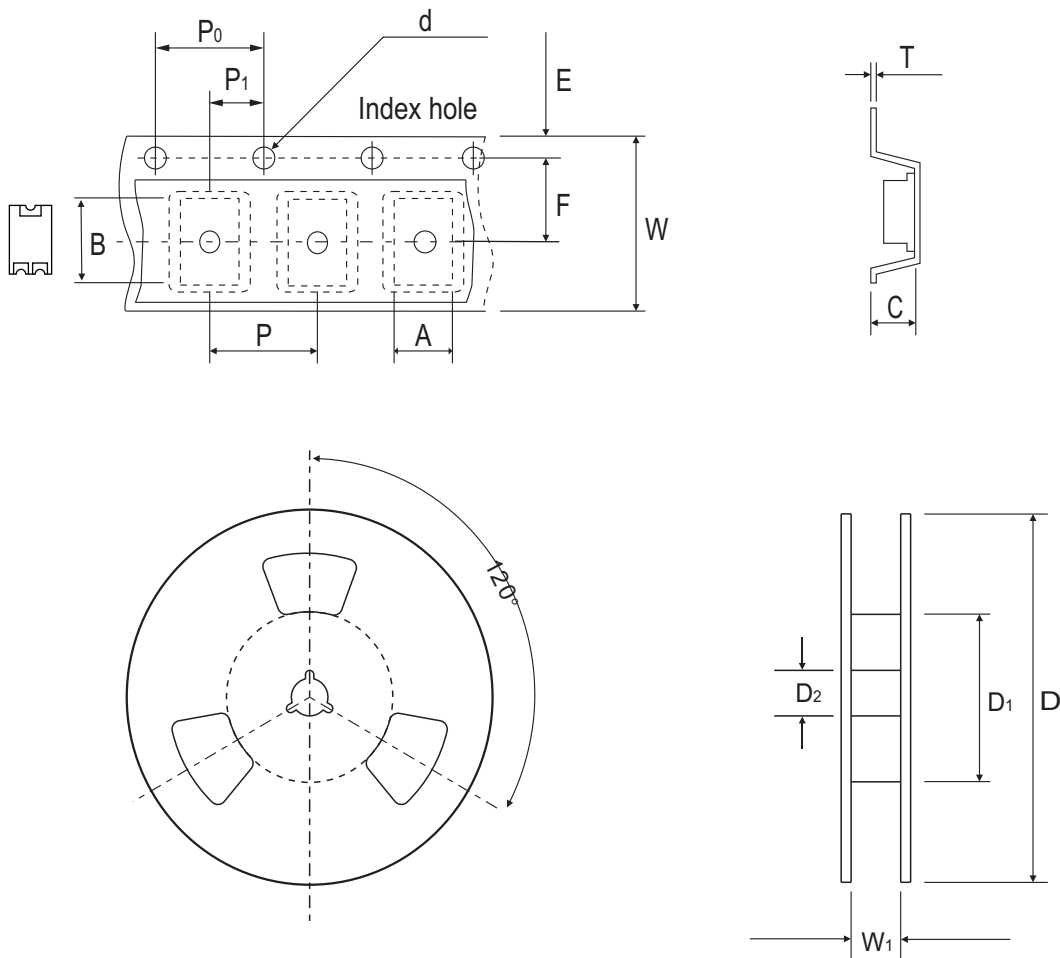


Fig.4 - Typical Reverse Characteristics



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

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

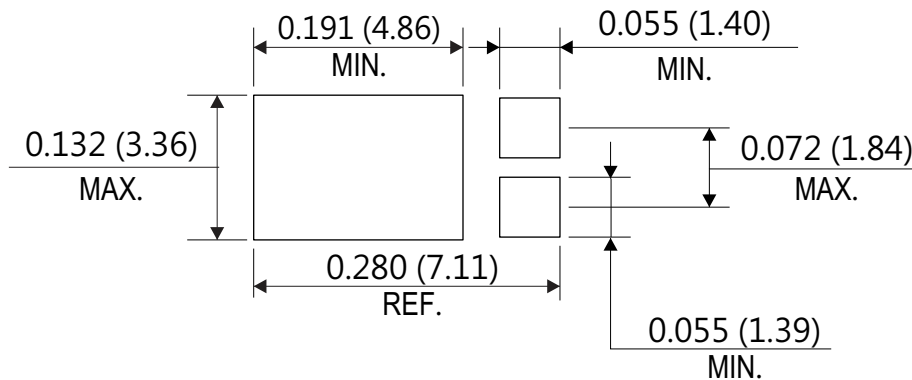
TO-277(Z3)	SYMBOL	E	F	P	P ₀	P ₁	W	W ₁
	(mm)	1.75 ± 0.10	5.50 ± 0.05	8.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	12.00 ± 0.30	14.4 MAX.
	(inch)	0.069 ± 0.004	0.217 ± 0.002	0.315 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.472 ± 0.012	0.567 MAX.

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

Marking Code



Suggested PAD Layout



Standard Packaging

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