

ACDBZ2240-HF

Reverse Voltage: 40 Volts

Forward Current: 2.0 Amp

RoHS Device

Halogen free

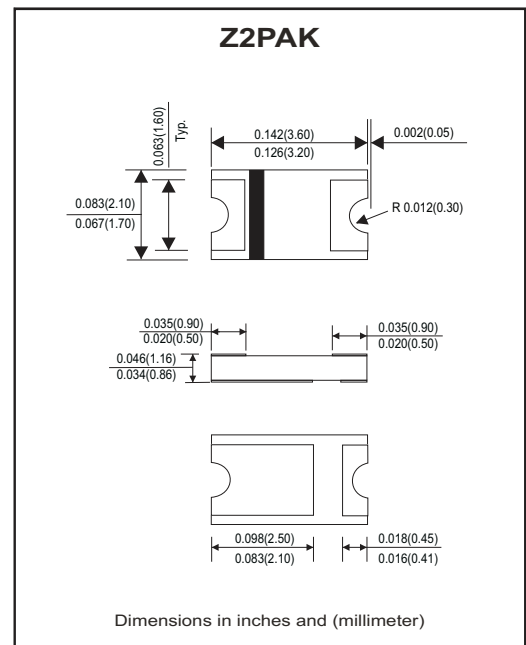


Features

- Lead less chip form, no lead damage.
- Low power loss, High efficiency.
- High current capability, low VF.
- Plastic package has UL 94V-0.
- Comply with AEC-Q101

Mechanical data

- Case: Packed with FRP substrate and epoxy underfilled.
- Terminals: Pure Tin plated (Lead-Free), solderable per MIL-STD-750, method 2026.
- Weight : 0.012 grams(approx.).



Circuit Diagram



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

Parameter	Symbol	Rating	Unit
Repetitive peak reverse voltage	VRRM	40	V
Average forward current	IF(AV)	2.0	A
Peak forward surge current (8.3ms single half sine-wave)	IFSM	40	A
Operating junction temperature range	TJ	-55 to +125	°C
Storage temperature range	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)	V _F	I _F = 0.5 A	-	0.36	-	V
		I _F = 1.0 A	-	0.43	-	
		I _F = 2.0 A	-	0.47	0.50	
Repetitive peak reverse current (Note 1)	I _{RRM}	V _R = Max. V _{RRM} , T _A = 25°C	-	0.03	0.2	mA
Junction capacitance	C _J	V _R = 4V, f = 1.0 MHz	-	115	-	pF
Thermal resistance	R _{θJA}	Junction to ambient (Note 2)	-	155	-	°C/W
	R _{θJL}	Junction to lead (Note 2)	-	25	-	

NOTES : (1) Pulse test width PW=300usec , 1% duty cycle.

(2) Mounted on P.C. board with 2.73*1.6mm & 0.86*1.6mm copper pad areas.

RATING AND CHARACTERISTIC CURVES (ACDBZ2240-HF)

Fig.1 - Forward Current Derating Curve

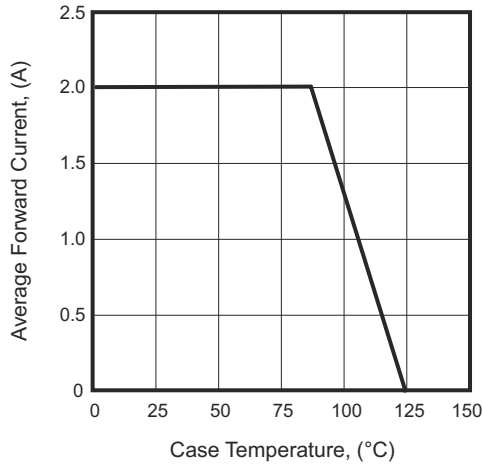


Fig.3 - Max. Non-repetitive Forward Peak Forward Surge Current

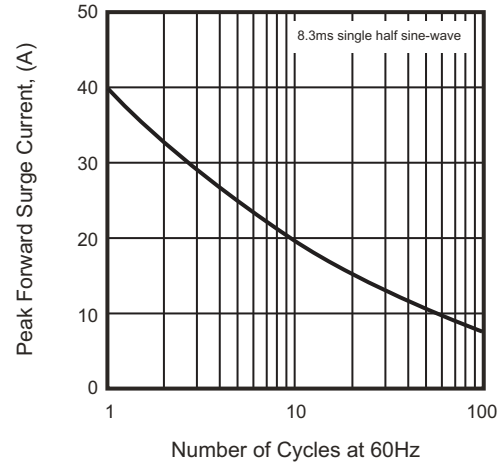


Fig.2 - Typical Forward Characteristics

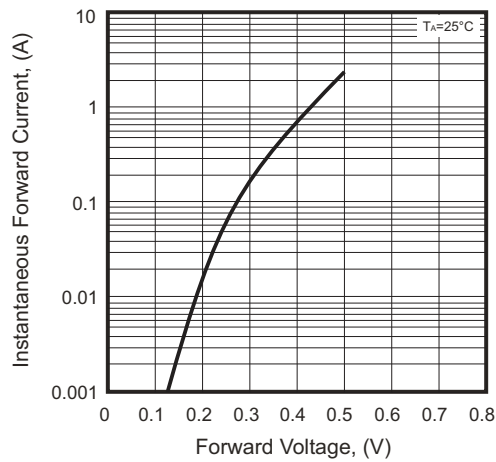


Fig.4 - Typical Reverse Characteristics

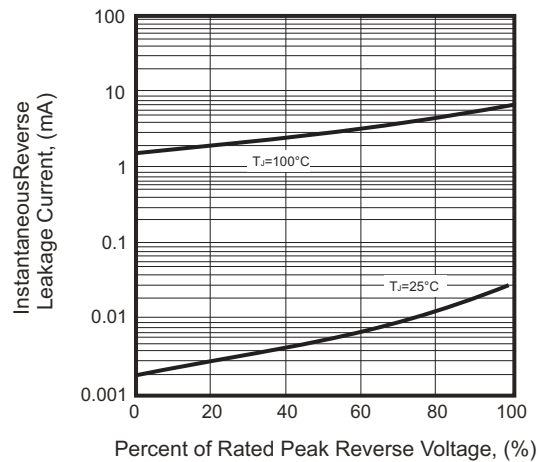
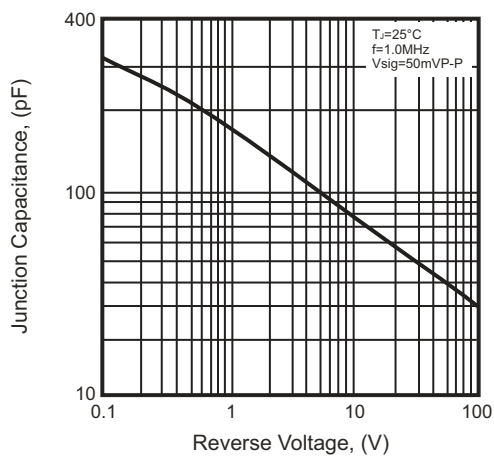
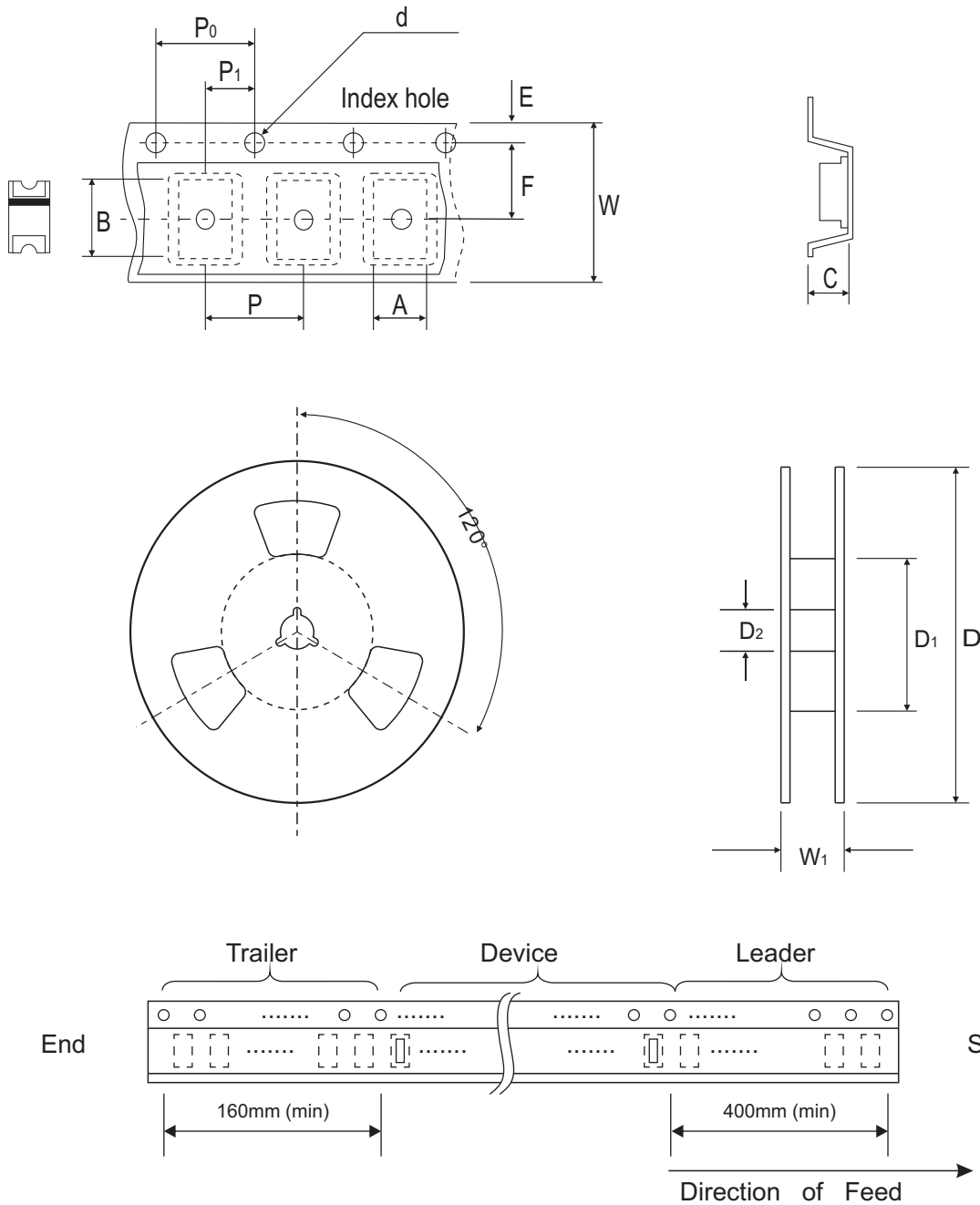


Fig.5 - Typical Junction Capacitance



Reel Taping Specification



Z2PAK	SYMBOL	A	B	C	d	D	D ₁	D ₂
	(mm)	2.20 ± 0.10	3.65 ± 0.10	1.28 ± 0.10	1.50 ± 0.10	178.00 ± 2.00	50.00 MIN.	13.00 ± 0.50
	(inch)	0.087 ± 0.004	0.144 ± 0.004	0.050 ± 0.004	0.059 ± 0.004	7.008 ± 0.079	1.969 MIN.	0.512 ± 0.020

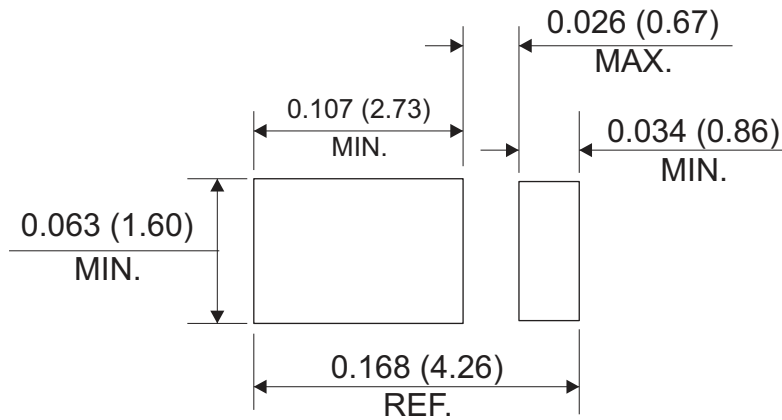
Z2PAK	SYMBOL	E	F	P	P ₀	P ₁	W	W ₁
	(mm)	1.75 ± 0.10	5.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	12.00 ± 0.30	18.70 MAX.
	(inch)	0.069 ± 0.004	0.217 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.472 ± 0.012	0.736 MAX.

Marking Code

Part Number	Marking Code
ACDBZ2240-HF	.L4.



Suggested PAD Layout



- NOTES : 1. Dimensions in inches and (millimeter)
 2. The Layout is just for reference.

Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
Z2PAK	3,000	7