BYD17ZH series

FEATURES

* Halogen-free type
* Lead free product, compliance to RoHS
* GPRC (Glass passivated rectifier chip) inside
* Lead less chip form, no lead damage
* Lead-free solder joint, no wire bond & lead frame
* Low power loss, High efficiency
* High current capability
* Plastic package has Underwriters Laboratory Flammability Classification 94V-0

APPLICATION

* High frequency rectification
* AC/DC Power Supply

MECHANICAL DATA

Case : Packed with FRP substrate and epoxy underfilled
Terminals : Pure Tin plated (Lead-Free), solderable per MIL-STD-750, Method 2026.
Polarity : Laser Cathode band marking
Weight : 0.012 gram

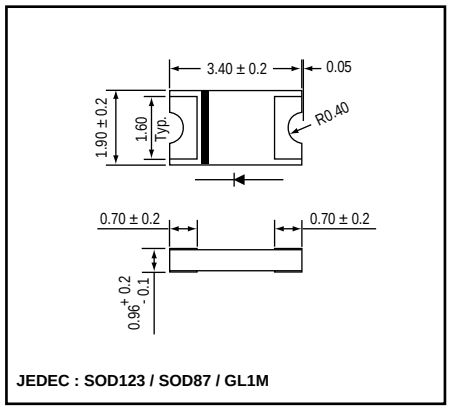
PACKING

* **3,000 pieces per 7" (178mm ± 2mm) reel**
* **4 reels per box**
* **6 boxes per carton**

OUTLINE DIMENSIONS

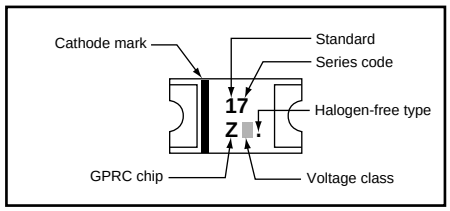
Case : 1206

Unit : mm



JEDEC : SOD123 / SOD87 / GL1M

MARKING



Absolute Maximum Ratings (Ta = 25 °C)

ITEM	Symbol	Conditions	BYD17Z					Unit
			DH	GH	JH	KH	MH	
Repetitive peak reverse voltage	V_{RRM}		200	400	600	800	1000	V
Average forward current	$I_{F(AV)}$		1.0					A
Peak forward surge current	I_{FSM}	8.3ms single half sine-wave	30					A
Operating storage temperature Range	T_j,T_{STG}		-65 to +175					°C

Electrical characteristics (Ta = 25 °C)

ITEM	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage (NOTE 1)	V_F	I_F = 0.1A I_F = 0.5A I_F = 1.0A	- - -	0.80 0.91 0.93	- - 1.00	V
Repetitive peak reverse current	I_{RRM}	V_R = Max. V_{RRM} , Ta = 25 °C	-	0.18	1	uA
Reverse recovery time	T_{rr}	I_F = 0.5A, I_R = 1.0A, I_{rr} = 0.25A	-	3000	-	nS
Junction capacitance	C_j	V_R = 4V, f = 1.0 MHz	-	12	-	pF
Thermal resistance	$R_{th(JA)}$	Junction to ambient (NOTE 1)	-	80	-	°C/W
	$R_{th(JL)}$	Junction to lead (NOTE 1)	-	40	-	

NOTES : (1) Thermal resistance from junction to ambient and from junction to lead P.C.B. mounted on 0.2 x 0.2" (5.0 x 5.0mm) copper pad areas.
(2) Preliminary draft.

FIG.1 - FORWARD CURRENT DERATING CURVE

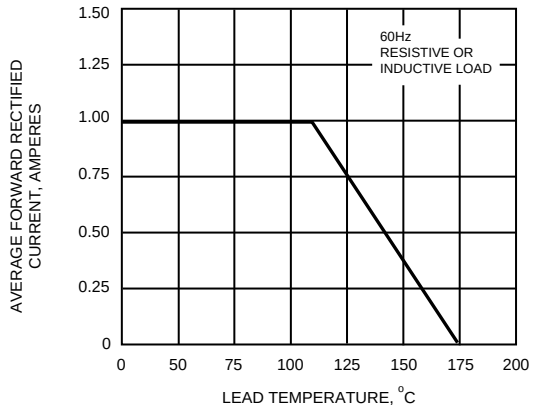


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

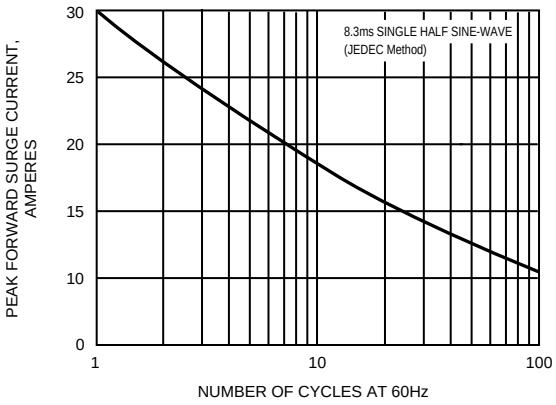


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

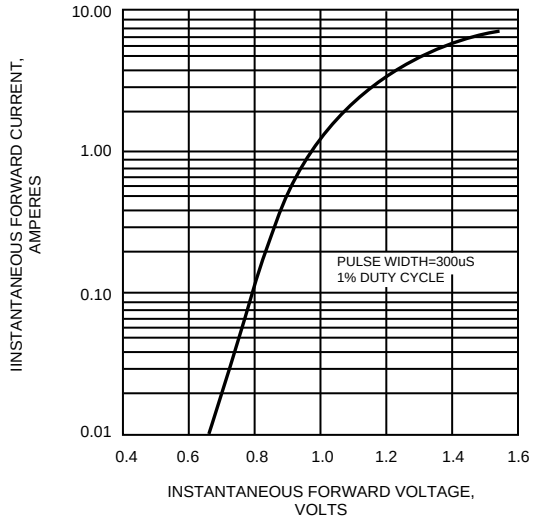


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

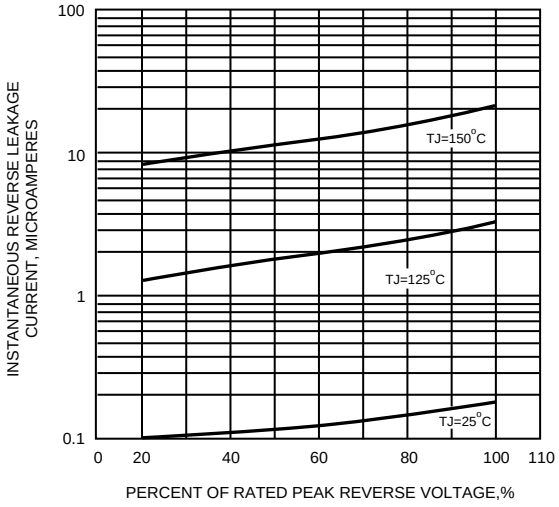


FIG.5 - TYPICAL JUNCTION CAPACITANCE

