

BYD147ZH

FEATURES

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

APPLICATION

- * Switching mode power supply applications
- * Portable equipment battery applications
- * High frequency rectification
- * DC / DC Converter
- * Telecommunication

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

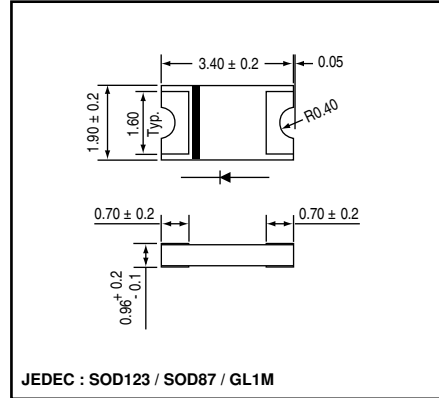
PACKING

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

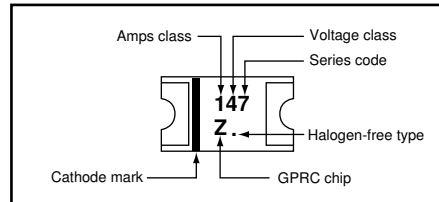
OUTLINE DIMENSIONS

Case : 1206

Unit : mm



MARKING



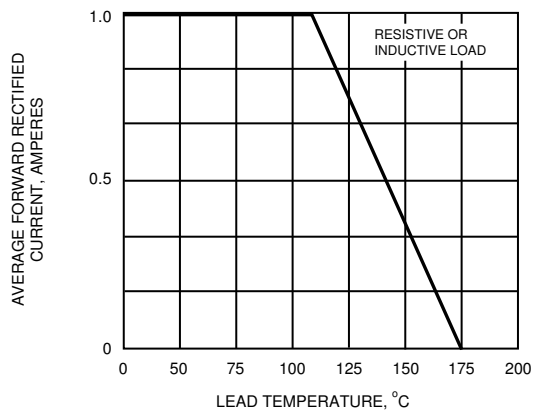
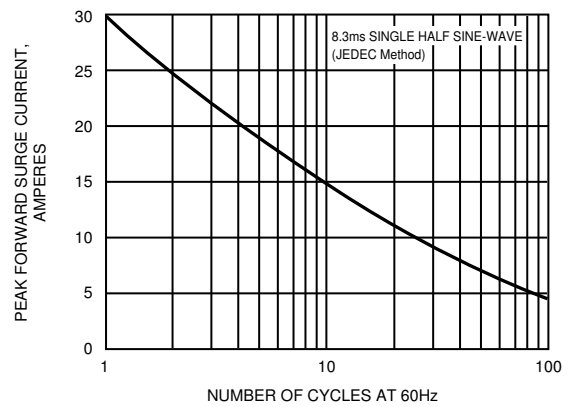
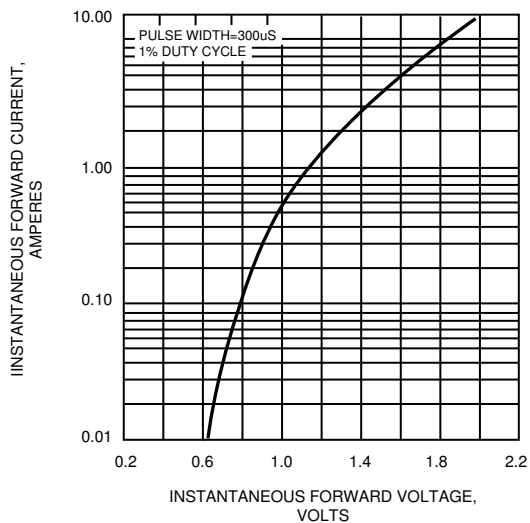
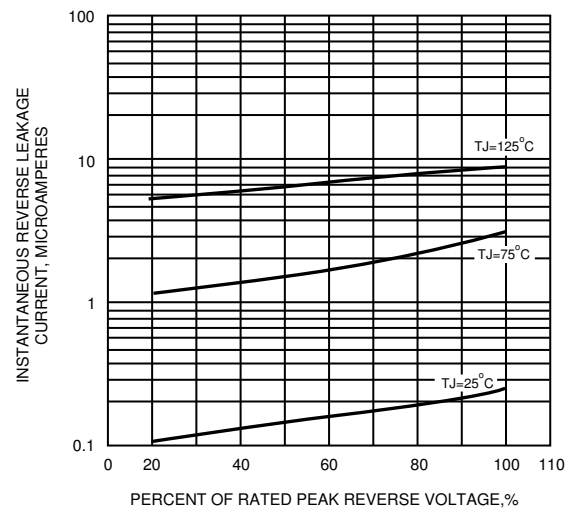
Absolute Maximum Ratings (Ta = 25 °C)

ITEM	Symbol	Conditions	BYD147ZH	Unit
Repetitive peak reverse voltage	VRRM		400	V
Average forward current	IF(AV)	TL = 110 °C	1.0	A
Peak forward surge current	IFSM	8.3ms single half sine-wave	30	A
Reverse recovery time	Trr	IF = 0.5A, IR = 1.0A, Irr = 0.25A	35	nS
Operating junction and storage temperature Range	Tj,TSTG		-65 to +175	°C

Electrical characteristics (Ta = 25 °C)

ITEM	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	VF	IF = 0.1A IF = 0.5A IF = 1.0A	- - -	0.80 0.98 1.15	- - 1.30	V
Repetitive peak reverse current	IRRM	VR = Max. VRRM, Ta = 25 °C	-	0.25	5	uA
Junction capacitance	Cj	VR = 4V, f = 1.0 MHz	-	10	-	pF
Thermal resistance	Rth(JA)	Junction to ambient (NOTE 1)	-	80	-	°C/W
	Rth(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
