

BYD17ZDLH THRU BYD17ZMLH

Low VF Rectifier Diode

FEATURES

- * Halogen-free type
- * Compliance to RoHS product
- * GPRC (Glass passivated rectifier chip) inside
- * Glass passivated cavity-free junction
- * Low forward voltage drop
- * 1.0 Ampere operation at $T_A=75^{\circ}\text{C}$ with no thermal runaway
- * Plastic package has Underwriters Laboratory Flammability Classification 94V-0

APPLICATION

- * General purpose rectification
- * Surge absorption

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

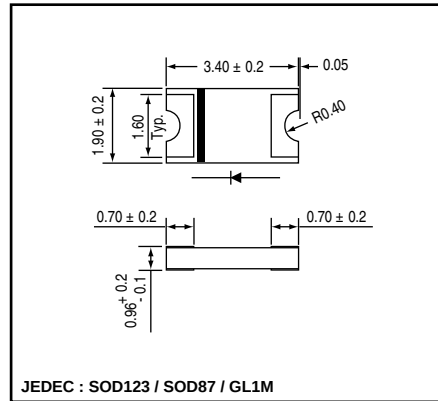
PACKING

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

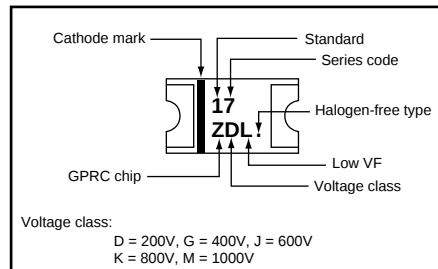
OUTLINE DIMENSIONS

Case : 1206

Unit : mm



MARKING



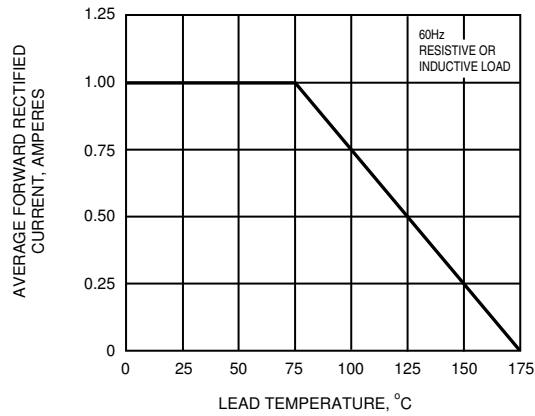
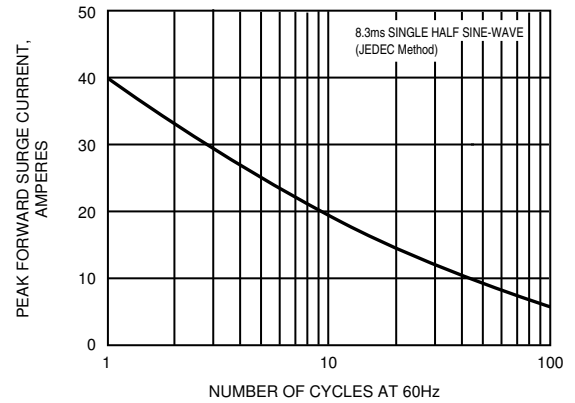
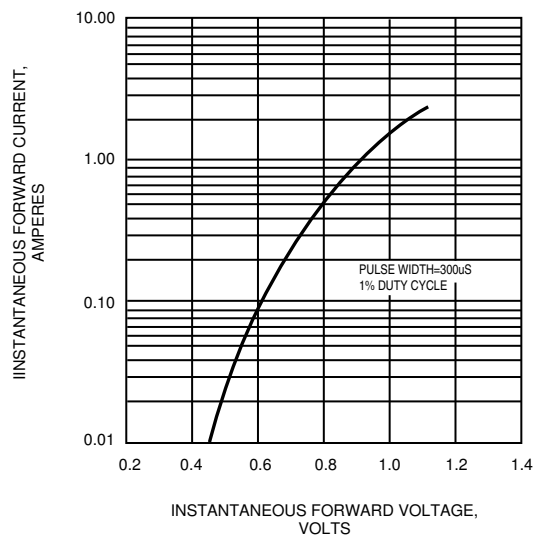
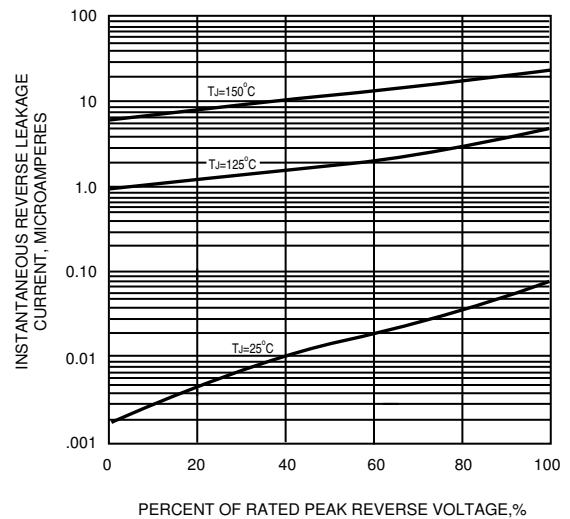
Absolute Maximum Ratings ($T_A = 25^{\circ}\text{C}$)

ITEM	Symbol	Rating					Unit
		BYD17ZDLH	BYD17ZGLH	BYD17ZJLH	BYD17ZKLH	BYD17ZMLH	
Repetitive peak reverse voltage	VRRM	200	400	600	800	1000	V
Average forward current	IF(AV)	1.0					A
Peak forward surge current (8.3ms single half sine-wave)	IFSM	40					
Operating junction temperature Range	Tj	-65 to +175					°C
Operating junction and storage temperature Range	TSTG	-65 to +175					

Electrical characteristics ($T_A = 25^{\circ}\text{C}$)

ITEM	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	VF	IF = 1.0A	-	0.91	0.93	V
Repetitive peak reverse current	IRRM	VR = Max. VRRM, $T_A = 25^{\circ}\text{C}$	-	0.08	5	μA
Junction capacitance	Cj	VR = 4V, f = 1.0 MHz	-	12	-	pF
Thermal resistance	Rth(JA)	Junction to ambient (NOTES)	-	130	-	$^{\circ}\text{C/W}$
	Rth(JL)	Junction to lead (NOTES)	-	45	-	

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
