

Z6PK30100H
FEATURES

- * Halogen-free type
- * Lead free product, compliance to RoHS
- * 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
- * Patented ZPAK™ Package Technology

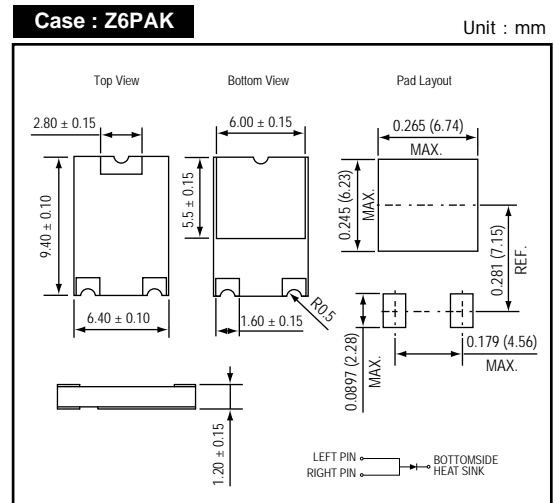
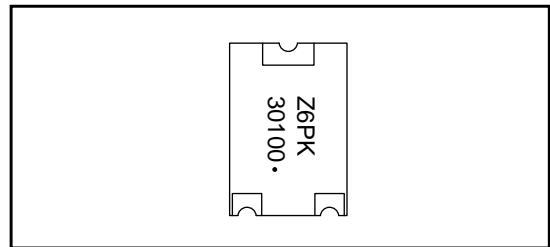
APPLICATION

- * Switching mode power supply applications
- * Portable equipment battery applications
- * High frequency rectification
- * DC / DC Converter
- * Designed as bypass diodes for solar panels

MECHANICAL DATA

Case : Packed with FRP substrate and epoxy underfilled

Terminals : Pure Tin plated (Lead-Free),
solderable per MIL-STD-750, Method 2026.

OUTLINE DIMENSIONS

MARKING

Absolute Maximum Ratings (Ta = 25 °C)

ITEM	Symbol	Conditions	Rating	Unit
Repetitive peak reverse voltage	VRRM		100	V
Average forward current	IF(AV)		30	A
Peak forward surge current	IFSM	8.3ms single half sine-wave	350	A
Operating junction temperature Range	Tj		-55 to +150	°C
Storage temperature Range	TSTG		-55 to +150	°C

Electrical characteristics (Ta = 25 °C)

ITEM	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage (NOTE 1)	VF	@IF = 20A	-	0.76	0.80	V
		@IF = 30A	-	0.82	0.85	
Repetitive peak reverse current	IRRM	@VR = Max. VRRM, Ta = 25 °C	-	3	50	uA
Thermal resistance	Rth(JA)	Junction to ambient (NOTE)	-	78	-	°C/W
	Rth(JC)	Junction to case (NOTE)	-	13	-	°C/W

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

(2) Mounted on P.C.B. with 5.0 x 5.0mm copper pad areas.

FIG.1 - FORWARD CURRENT DERATING CURVE

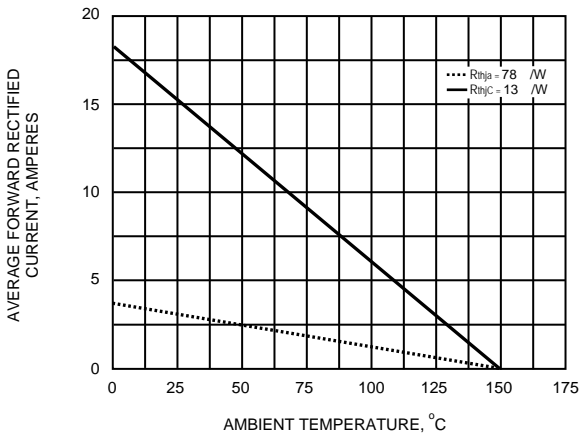


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

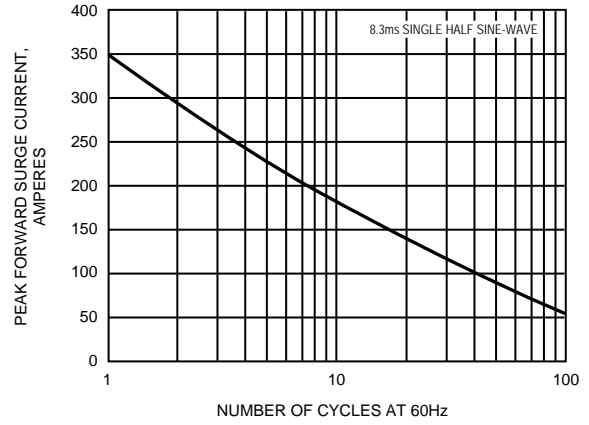


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

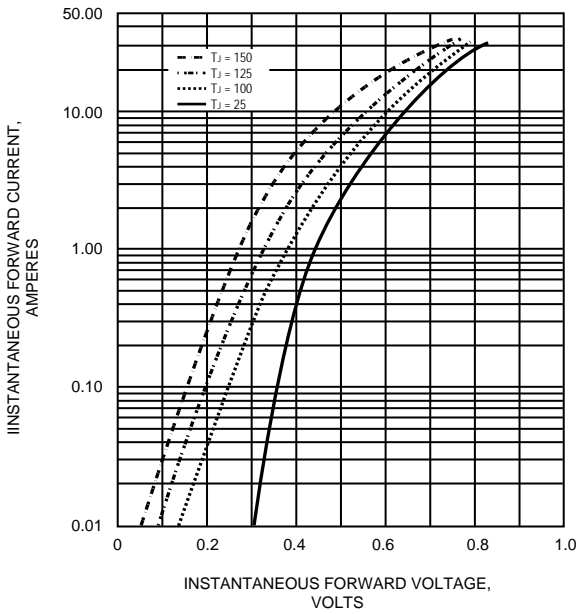


FIG.4 - TYPICAL REVERSE CHARACTERISTICS

