

**Z2APK54H**
**● 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
- \* Telecommunication

**● MECHANICAL DATA**

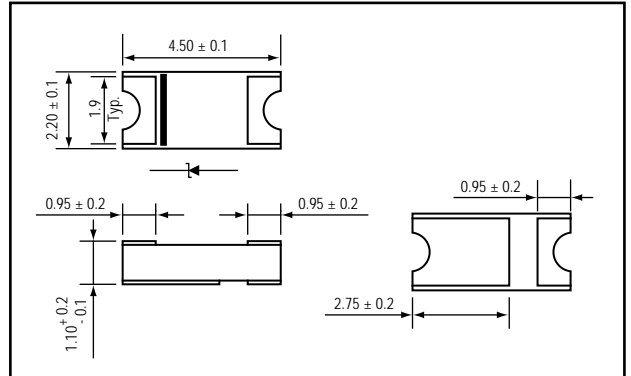
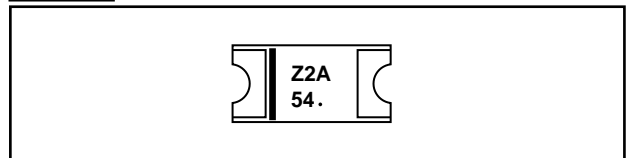
**Case :** Packed with FRP substrate and epoxy underfilled  
**Terminals :** Pure Tin plated (Lead-Free),  
 solderable per MIL-STD-750, Method 2026.

**● PACKING**

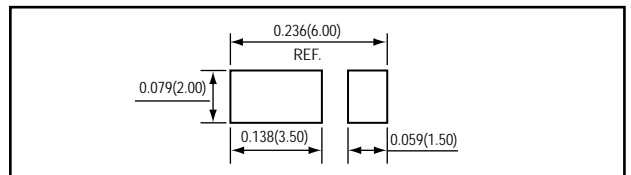
- \* 3,000 pieces per 7" (178mm ± 2mm) reel
- \* 4 reels per box
- \* 6 boxes per carton

**● OUTLINE DIMENSIONS**
**Case : Z2APAK**

Unit : mm


**● MARKING**

**● MOUNTING PAD LAYOUT**

Unit : mm

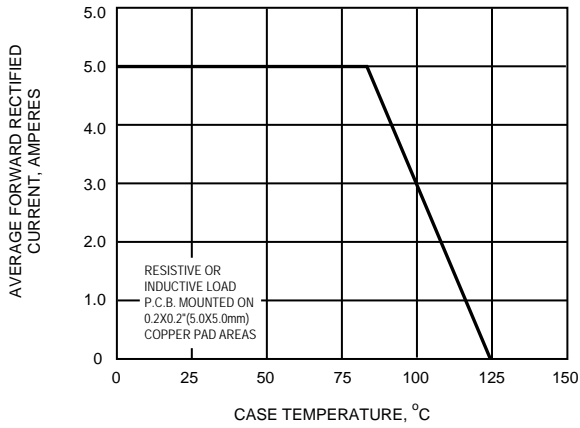
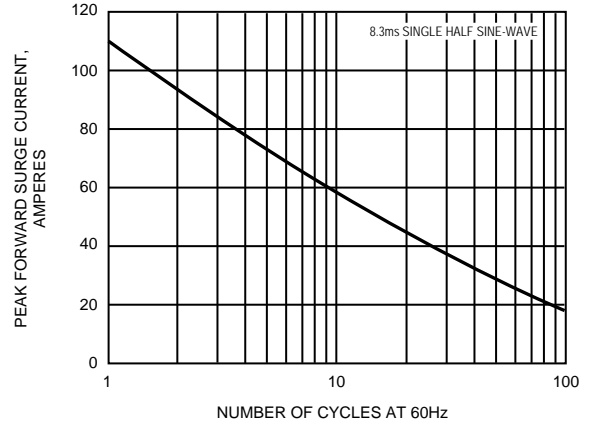
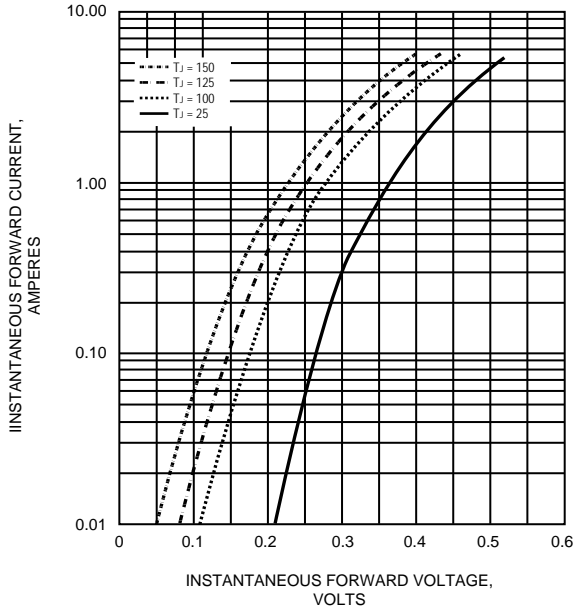

**Absolute Maximum Ratings (Ta = 25 °C)**

ITEM	Symbol	Conditions	Rating	Unit
Repetitive peak reverse voltage	VRRM		40	V
Average forward current	IF(AV)		5	A
Peak forward surge current	IFSM	8.3ms single half sine-wave	110	A
Operating junction temperature Range	Tj		-55 to +125	°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 = 5A	-	0.52	0.55	V	
Repetitive peak reverse current	IRRM	VR = Max. VRRM	Ta = 25 °C	-	0.05	0.20	mA
			Ta = 100 °C	-	-	10	
Thermal resistance	Rth(JA)	Junction to ambient (NOTE 2)	-	126	-	°C/W	
	Rth(JC)	Junction to case (NOTE 2)	-	10	-	°C/W	

NOTES : (1) Pulse test width PW=300usec , 1% duty cycle.  
 (2) Mounted on P.C.B. with 2.0 x 2.0mm 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**
