

## Z4RGP30MAPH

### FEATURES

- \* Halogen-free type
- \* Glass passivated chip junctions
- \* Compliance to RoHS product
- \* Leadless chip form, no lead damage
- \* Low power loss, High efficiency
- \* High current capability
- \* Plastic package has Underwriters Laboratory Flammability Classification 94V-0

### APPLICATION

- \* AC/DC Power Supply
- \* Communication Equipment

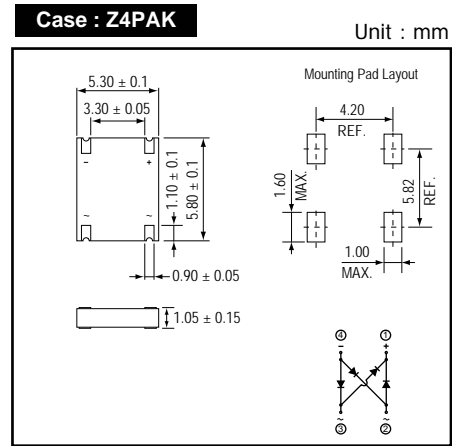
### MECHANICAL DATA

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

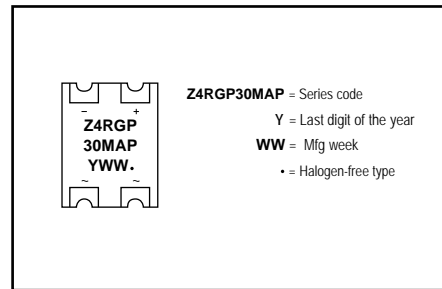
### PACKING

- \* 5,000 pieces per 13" (330mm ± 2mm) reel
- \* 2 reels per box
- \* 5 boxes per carton

### OUTLINE DIMENSIONS



### MARKING



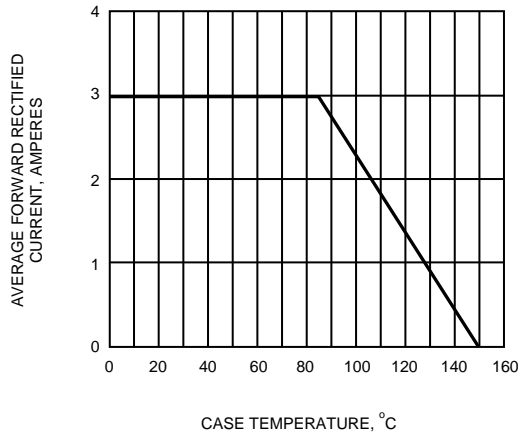
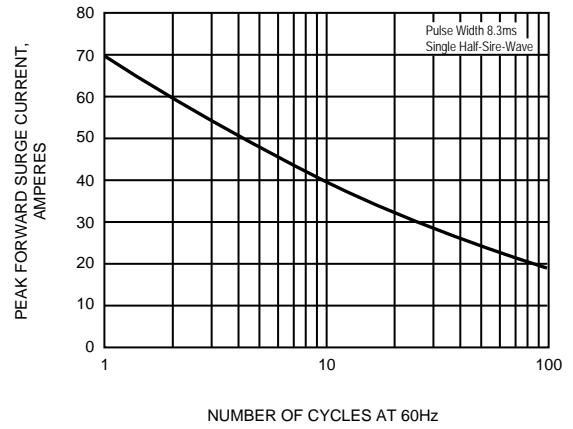
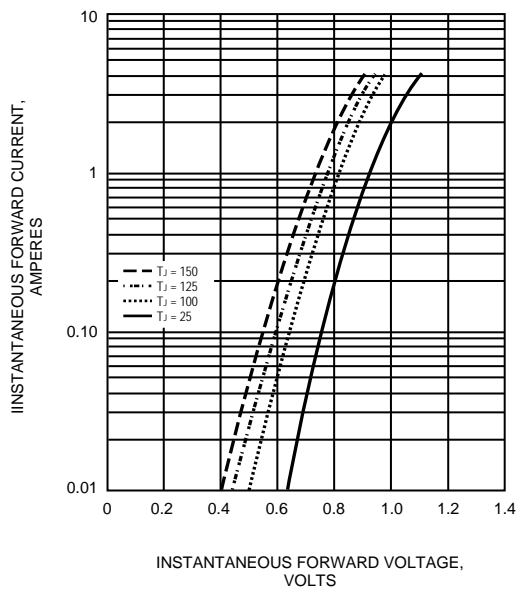
### Absolute Maximum Ratings (Ta = 25 °C)

ITEM	Symbol	Conditions	Rating	Unit
Repetitive peak reverse voltage	VRRM		1000	V
Average forward current	IF(AV)		3	A
Peak forward surge current	IFSM	8.3ms single half sine-wave	70	A
Reverse recovery time	Trr	IF = 0.5A, IR = 1.0A, Irr = 0.25A	250	nS
Operating junction and storage temperature Range	Tj, TSTG		-55 to +150	°C

### Electrical characteristics (Ta = 25 °C)

ITEM	Symbol	Conditions	Min.	Typ.	Max.	Unit
Forward voltage	VF	@ IF = 3A Ta = 25 °C	-	1.10	1.30	V
Repetitive peak reverse current	IRRM	VR = Max. VRRM Ta = 25 °C	-	0.20	5	uA
Current squared time	I <sup>2</sup> t	t < 8.3ms, Ta = 25 °C	-	20.3	-	A <sup>2</sup> s
Thermal resistance	Rth(JA)	Junction to ambient (NOTE)	-	95	-	°C/W
	Rth(JC)	Junction to case (NOTE)	-	15	-	

NOTES : (1) Thermal resistance, junction to ambient, measured on PC board with 50mm<sup>2</sup> (0.03mm thick) land areas.  
 (2) Preliminary specification

**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**
