

**BEGC30DH THRU BEGC30MH**

● **FEATURES**

- \* Halogen-free type
- \* Compliance to RoHS product
- \* GPRC (Glass passivated rectifier chip) inside
- \* Glass passivated cavity-free junction
- \* 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**

- \* General purpose rectification
- \* Surge absorption

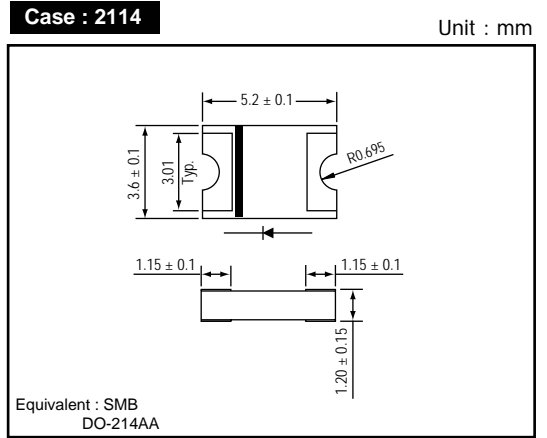
● **MECHANICAL DATA**

**Case :** Packed with FRP substrate and epoxy underfilled  
**Terminals :** Pure Tin plated (Lead-Free), solderable per MIL-STD-750, Method 2026.  
**Polarity :** Cathode Band, Laser marking  
**Weight :** 0.04 gram

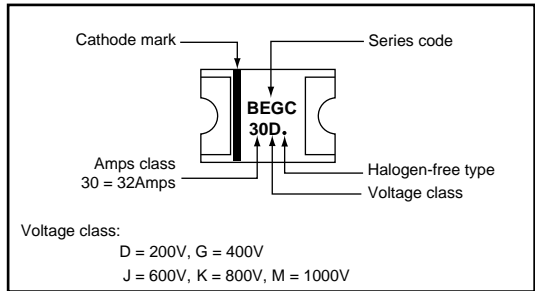
● **PACKING**

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

● **OUTLINE DIMENSIONS**



● **MARKING**



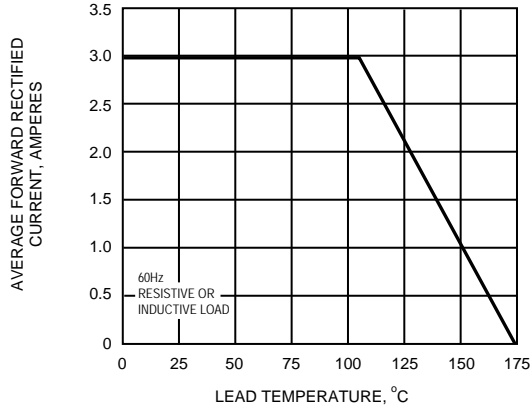
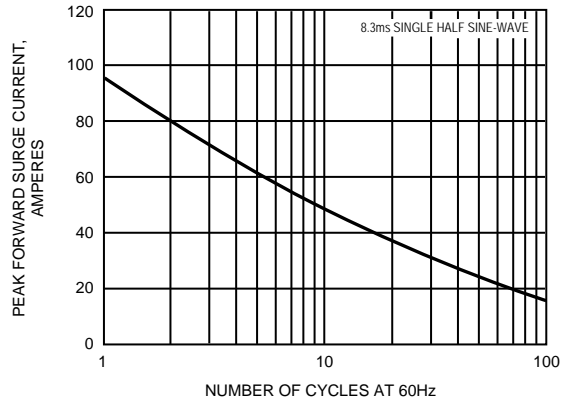
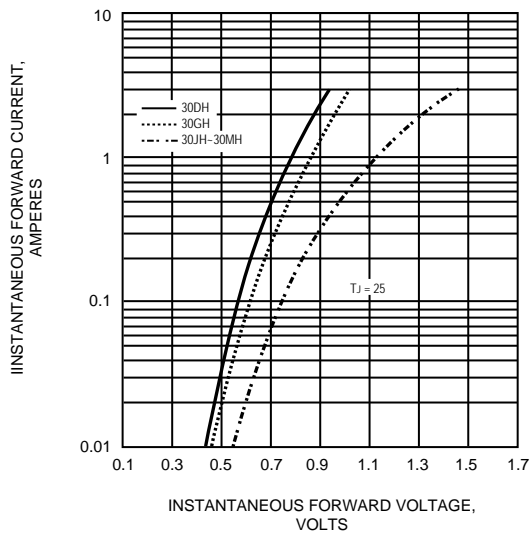
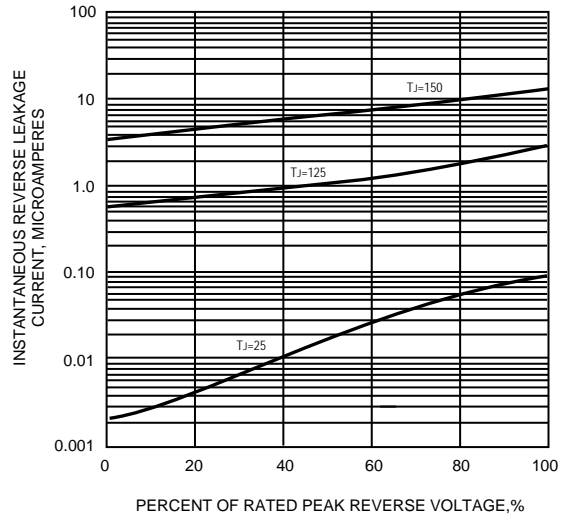
**Absolute Maximum Ratings (Ta = 25 °C)**

ITEM	Symbol	Conditions	BEGC30					Unit
			DH	GH	JH	KH	MH	
Repetitive peak reverse voltage	VRRM		200	400	600	800	1000	V
Average forward current	IF(AV)		3.0					A
Peak forward surge current	IFSM	8.3ms single half sine-wave	95					A
Reverse recovery time	Trr	IF = 0.5A, IR = 1.0A, Irr = 0.25A	50		75			nS
Operating storage temperature Range	Tj, TSTG		-65 to +175					°C

**Electrical characteristics**

ITEM	Symbol	Conditions	Type	Min.	Typ.	Max.	Unit
Forward voltage	VF	IF = 3.0A	BEGC30DH	-	0.93	1.00	V
			BEGC30GH	-	1.05	1.25	
			BEGC30JH	-	1.45	1.70	
			BEGC30KH	-	1.45	1.70	
			BEGC30MH	-	1.45	1.70	
Repetitive peak reverse current	IRRM	VR = Max. VRRM , Ta = 25 °C		-	0.10	5	uA
Junction capacitance	Cj	VR = 4V, f = 1.0 MHz		-	29	-	pF
Thermal resistance	Rth(JA)	Junction to ambient (NOTE)		-	68	-	°C/W
	Rth(JL)	Junction to lead (NOTE)		-	19	-	

NOTES : 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.

**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**
