

**UGC20DH THRU UGC20KH**
**● 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**

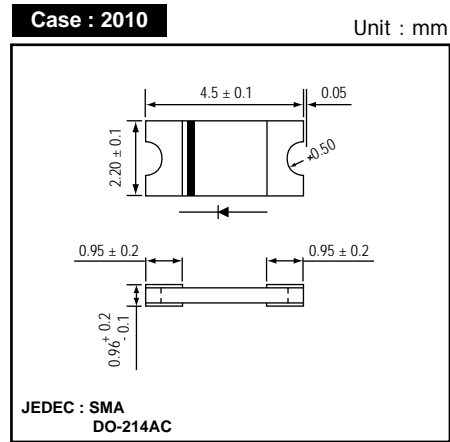
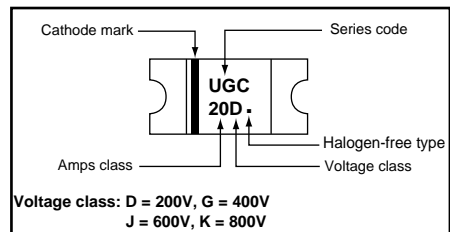
- \* Switching mode power supply applications
- \* Portable equipment battery applications
- \* General rectification
- \* DC / DC Converter
- \* Telecommunication

**● MECHANICAL DATA**

**Case :** Packed with FRP substrate and epoxy underfilled  
**Terminals :** Pure Tin plated (Lead-Free), solderable per MIL-STD-750, Method 2026.  
**Polarity :** Cathode band, Laser marking  
**Weight :** 0.02 gram

**● PACKING**

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

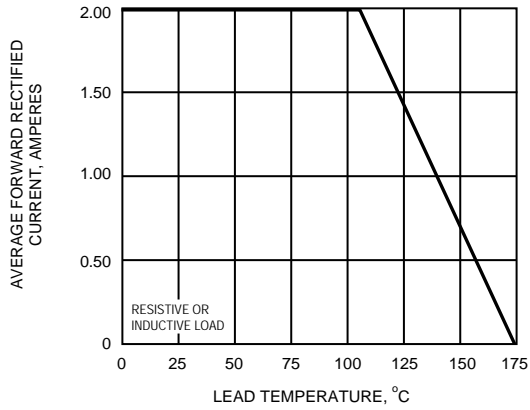
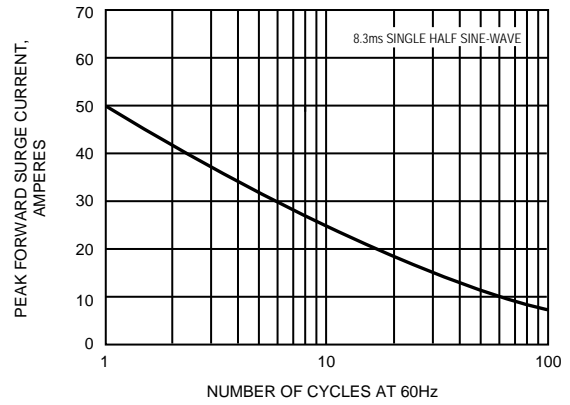
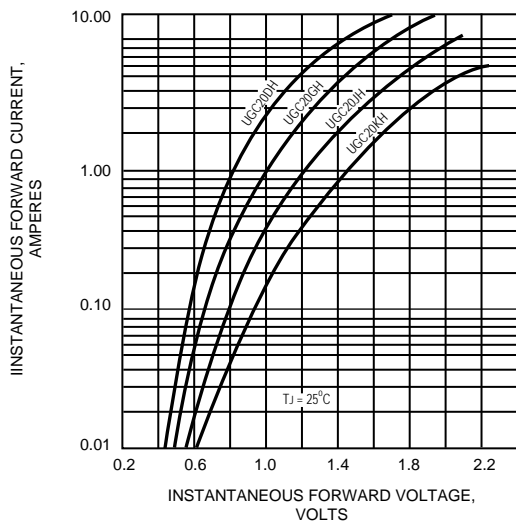
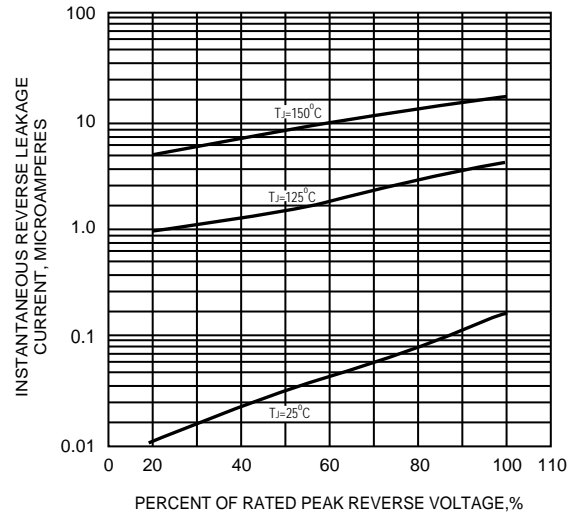
**● OUTLINE DIMENSIONS**

**● MARKING**

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

ITEM	Symbol	Conditions	UGC20				Unit
			DH	GH	JH	KH	
Repetitive peak reverse voltage	VRRM		200	400	600	800	V
Average forward current	IF(AV)		2.0				A
Peak forward surge current	IFSM	8.3ms single half sine-wave	50				A
Reverse recovery time	Trr	IF = 0.5A, IR = 1.0A, Irr = 0.25A	35				nS
Operating junction and storage temperature Range	Tj, TSTG		-65 to +175				°C

**Electrical characteristics**

ITEM	Symbol	Conditions	Type	Min.	Typ.	Max.	Unit
Forward voltage	VF	IF = 2.0A	UGC20DH	-	0.94	0.95	V
			UGC20GH	-	1.15	1.25	
			UGC20JH	-	1.40	1.70	
			UGC20KH	-	1.65	2.20	
Repetitive peak reverse current	IRRM	VR = Max. VRRM, Ta = 25 °C		-	0.20	5	uA
Junction capacitance	Cj	VR = 4V, f = 1.0 MHz		-	19	-	pF
Thermal resistance	Rth(JA)	Junction to ambient (NOTE)		-	85	-	°C/W
	Rth(JL)	Junction to lead (NOTE)		-	18	-	

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**
