

**UGC10DAPH AND UGC10GAPH**
**● FEATURES**

- \* Halogen-free type
- \* Compliance to RoHS product
- \* Glass passivated chip
- \* 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**

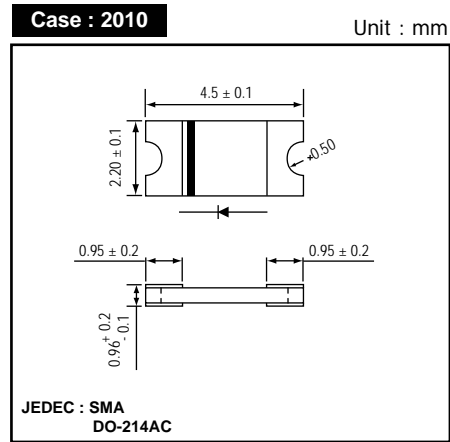
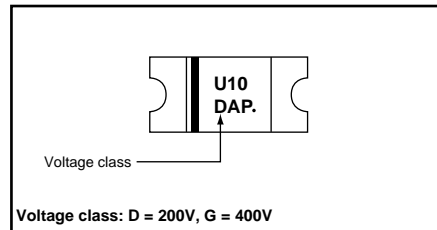
- \* Switching mode power supply applications
- \* Portable equipment battery applications
- \* General rectification
- \* DC / DC Converter
- \* Telecommunication

**● 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

**● PACKING**

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

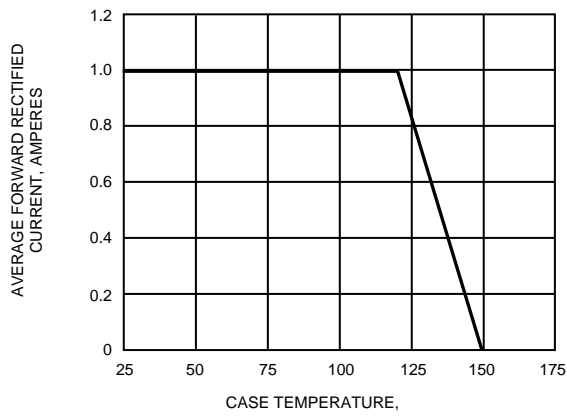
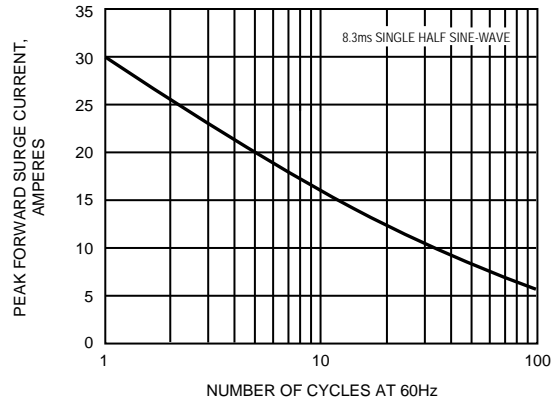
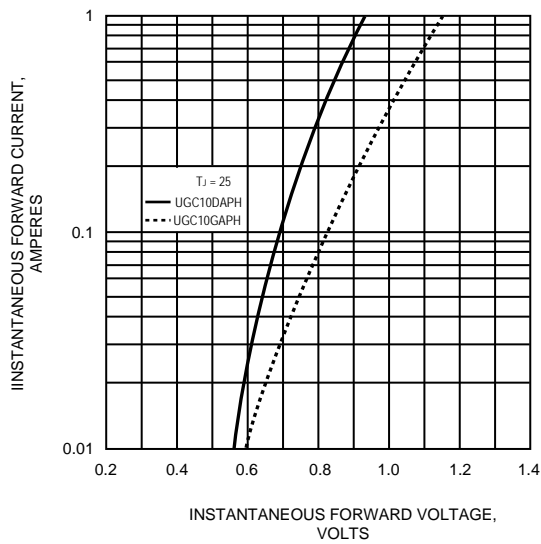
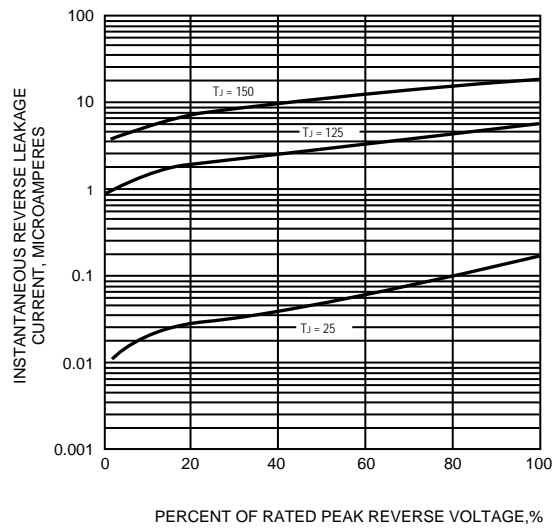
**● OUTLINE DIMENSIONS**

**● MARKING**

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

ITEM	Symbol	Conditions	Rating		Unit
			UGC10DAPH	UGC10GAPH	
Repetitive peak reverse voltage	VRRM		200	400	V
Average forward current	IF(AV)		1.0		A
Peak forward surge current	IFSM	8.3ms single half sine-wave	30		A
Reverse recovery time	Trr	IF = 0.5A, IR = 1.0A, Irr = 0.25A	20	25	nS
Operating storage temperature Range	Tj,TSTG		-55 to +150		°C

**Electrical characteristics**

ITEM	Symbol	Conditions	Type	Typ.	Max.	Unit
Forward voltage	VF	IF = 1.0A	UGC10DH	0.92	0.95	V
			UGC10GH	1.15	1.25	
Repetitive peak reverse current	IRRM	VR = Max. VRRM , Ta = 25 °C		0.20	5	uA
Junction capacitance	Cj	VR = 4V, f = 1.0 MHz	UGC10DH	18	-	pF
			UGC10GH	13	-	
Thermal resistance	Rth(JA)	Junction to ambient (NOTE 1)		85	-	°C/W
	Rth(JC)	Junction to cead (NOTE 1)		18	-	

NOTES : (1) 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.  
(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**

**FIG.5 - TYPICAL JUNCTION CAPACITANCE**
