

**GP10DL THRU GP10ML**  
**Low VF Rectifier Diode**

● **FEATURES**

- \* GPRC (Glass passivated rectifier chip) inside
- \* Glass passivated cavity-free junction
- \* Compliance to RoHS product
- \* Low forward voltage drop
- \* 1.0 Ampere operation at TA=75°C with no thermal runaway
- \* Plastic package has Underwriters Laboratory Flammability Classification 94V-0

● **APPLICATION**

- \* General purpose rectification
- \* Surge absorption

● **MECHANICAL DATA**

**Case :** DO-204AL molded plastic  
**Terminals :** Tin Plated, solderable per MIL-STD-750, Method 2026.  
**Polarity :** Color band denotes cathode end  
**Weight :** 0.3 gram

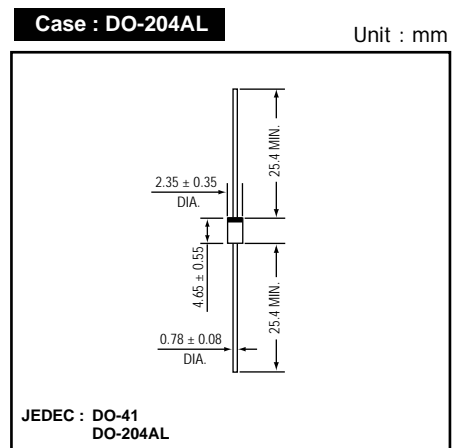
● **PACKING**

- Bulk :**
- \* 1,000 pieces box
  - \* 50 boxes per (465x215x265mm) carton
- Reel :**
- \* 5,000 pieces per reel
  - \* 4 reels per (340x340x330mm) carton

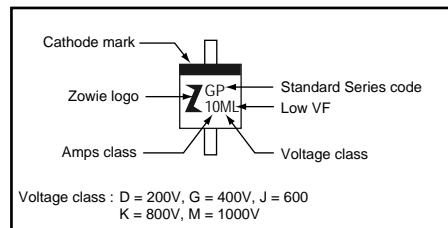
**VF < 0.90V @IF = 1A**

**IFSM = 50Amp**

● **OUTLINE DIMENSIONS**



● **MARKING**



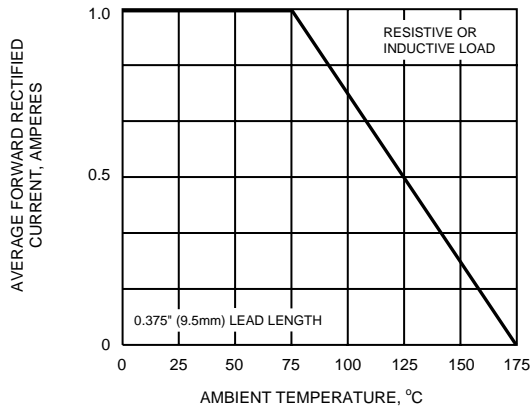
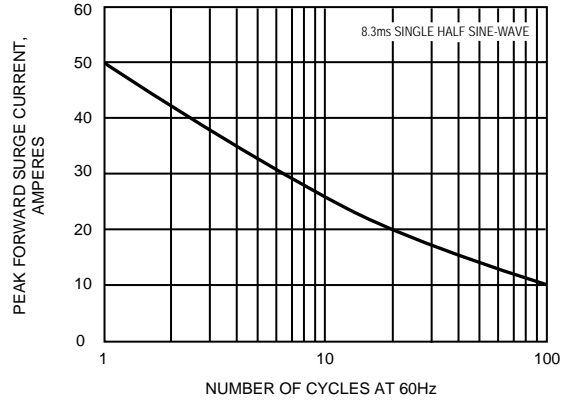
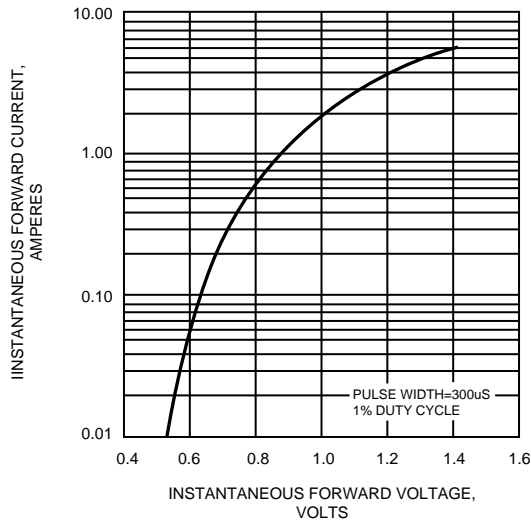
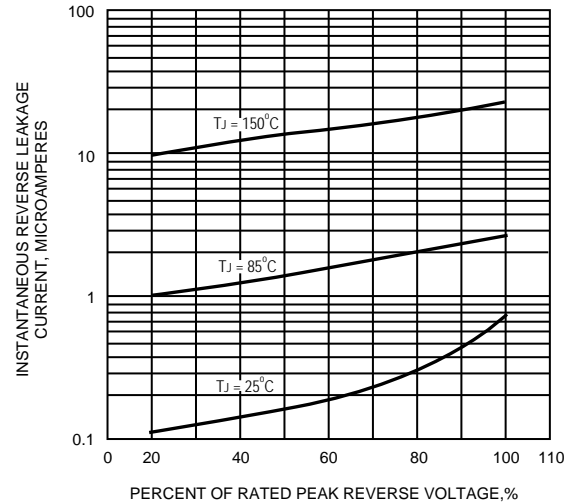
**Absolute Maximum Ratings (Ta = 25 °C)**

ITEM	Symbol	Ratings					Unit
		GP10DL	GP10GL	GP10JL	GP10KL	GP10ML	
Repetitive peak reverse voltage	VRRM	200	400	600	800	1000	V
Average forward current	IF(AV)	1.0					A
Peak forward surge current (8.3ms single half sine-wave)	IFSM	50					
Operating junction temperature Range	Tj	-65 to +175					°C
Storage temperature Range	TSTG	-65 to +175					

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

ITEM	Symbol	Conditions	Type	Min.	Typ.	Max.	Unit
Forward voltage	VF	IF = 1.0A	GP10DL				V
			GP10GL	-	0.87	0.90	
			GP10JL				
			GP10KL	-	0.90	0.92	
			GP10ML				
Repetitive peak reverse current	IRRM	VR = Max. VRRM , Ta = 25 °C		-	0.08	5	uA
Junction capacitance	Cj	VR = 4V, f = 1.0 MHz		-	10	-	pF
Thermal resistance	Rth(JA)	Junction to ambient *		-	55	-	°C/W
	Rth(JL)	Junction to lead *		-	24	-	

\* Thermal resistance from junction to ambient at 0.375" (9.5 mm) lead lengths, P.C.B. mounted.

**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**
