

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

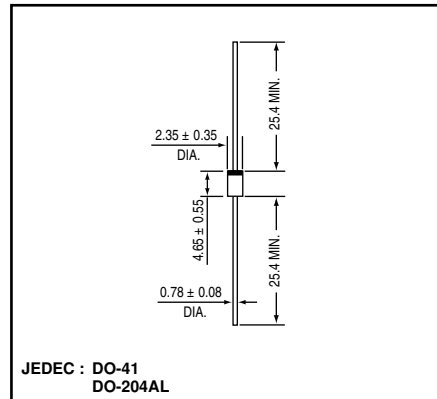
VF < 0.90V @IF = 1A

IFSM = 50Amp

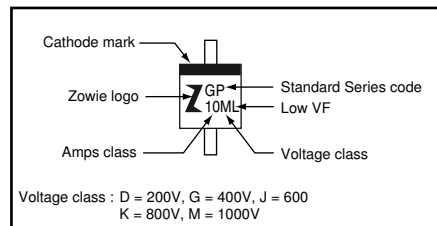
● OUTLINE DIMENSIONS

Case : DO-204AL

Unit : mm



● MARKING



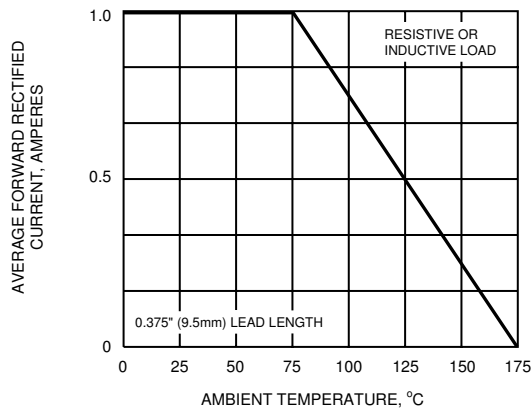
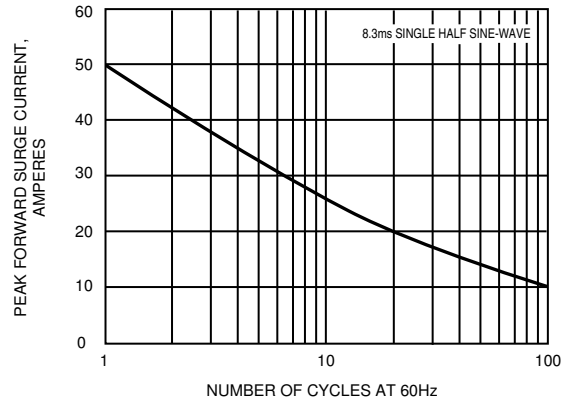
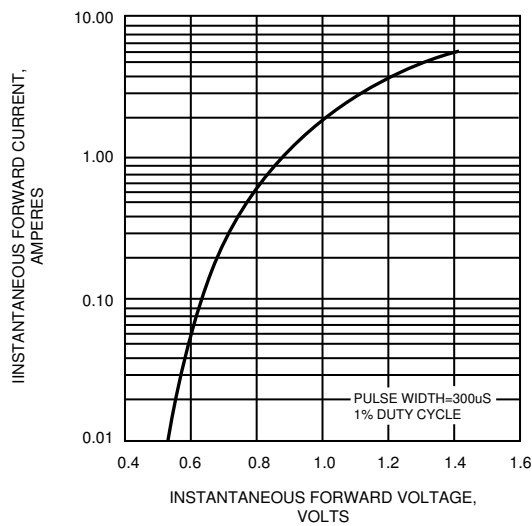
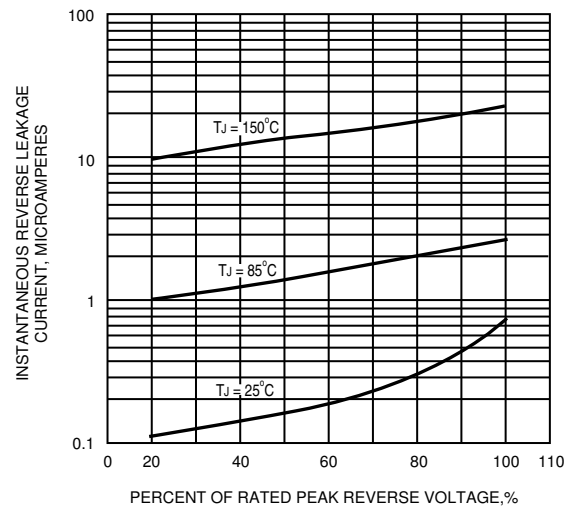
Absolute Maximum Ratings (Ta = 25 °C)

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
