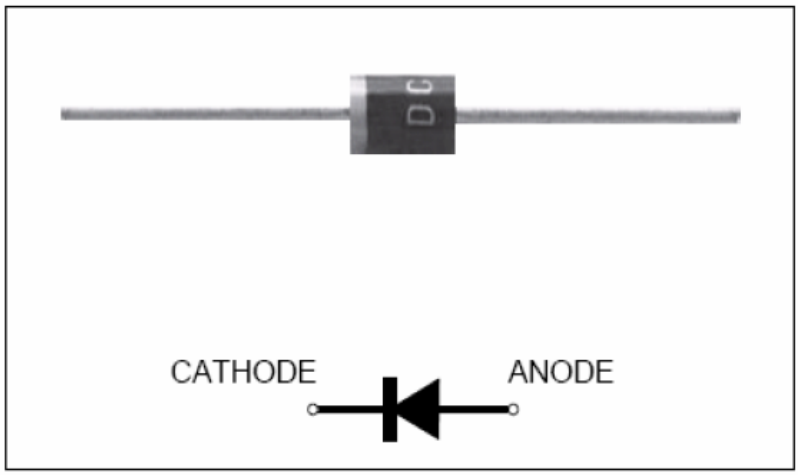
1N4942G thru 1N4948G

1.Feature & Dimensions

Glass Passivated Junction
Fast Recovery Rectifiers
Reverse Voltage 200 to 1000V
Forward Current 1.0A

* Plastic package has Underwriters Laboratory Flammability Classification 94V-0
* High temperature metallurgically bonded construction
* Cavity-free glass passivated junction
* Capable of meeting environmental standards of MIL-S-19500
* 1.0 A operation at T_A=75°C with no thermal runaway
* For use in high frequency rectifier circuits
* Fast switching for high efficiency
* Typical IR less than 1.0μA
* High temperature soldering guaranteed: 260°C/10 seconds
* 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension



2.Mechanical Data

Case: JEDEC DO-41, molded plastic body
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.012 oz., 0.34 g
Handling precautin:None

We declare that the material of product compliance with RoHS requirements.

3.Electrical Characteristic

Maximum Ratings & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	1N4942G	1N4944G	1N4946G	1N4947G	1N4948G	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	200	400	600	800	1000	V
Maximum average forward rectified current 0.375" (9.5mm) lead length at T_A = 75°C	IF(AV)	1.0					A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	25					A
Typical thermal resistance (Note 2)	RθJA	55					°C/W
Operating junction and storage temperature range	TJ, TSTG	–50 to +150					°C

Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	1N4942G	1N4944G	1N4946G	1N4947G	1N4948G	Unit
Maximum instantaneous forward voltage at 1.0A	V_F	1.3					V
Maximum DC reverse current TA = 25°C at rated DC blocking voltage TA = 125°C	IR	5.0 100					μA
Typical reverse recovery time (Note 1)	trr	150		250		500	ns
Typical junction capacitance at 4.0V, 1MHz	CJ	15					PF

NOTES:
1. IF = 0.5A, IR = 1.0A, IRR = 0.25A
2. Thermal resistance from junction to ambient at 0.375” (9.5mm) lead length, P.C.B. mounted

4. Characteristic Curves (TA = 25°C unless otherwise noted)

Fig. 1 – Forward Current Derating Curve

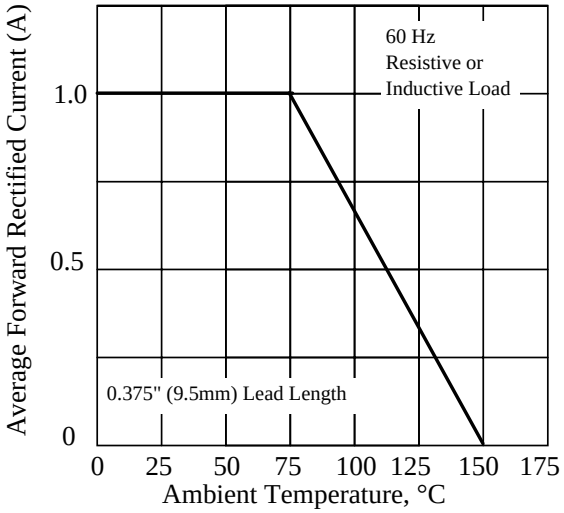


Fig. 2 – Maximum Non-repetitive Peak Forward Surge Current

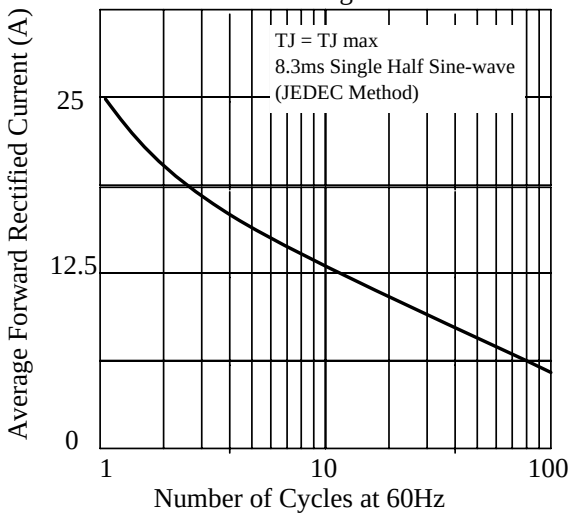


Fig 3. – Typical Instantaneous Forward Characteristics

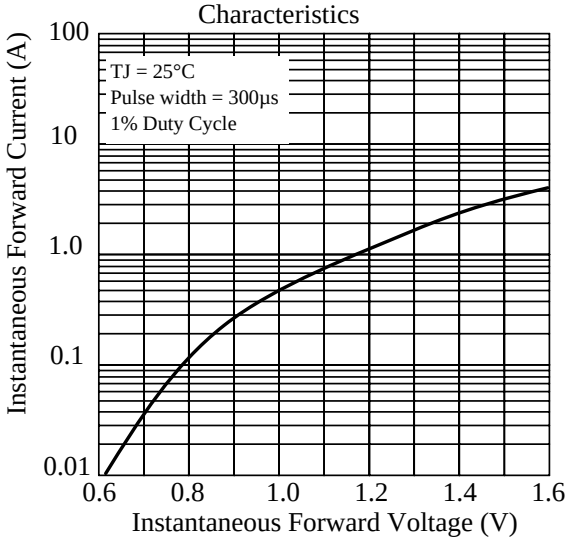


Fig 4. – Typical Reverse Characteristics

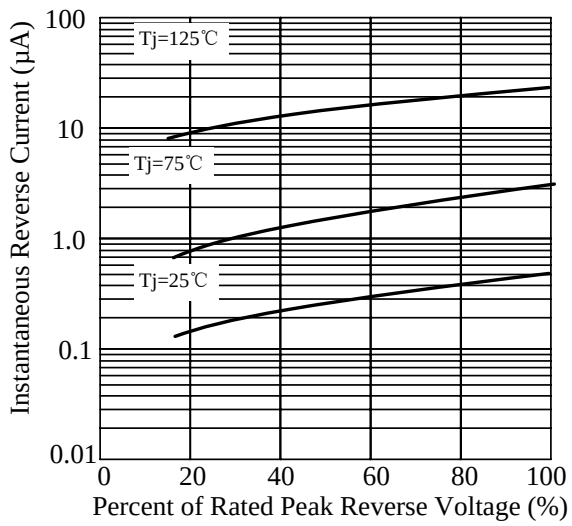


Fig 5. – typical transient thermal impedance

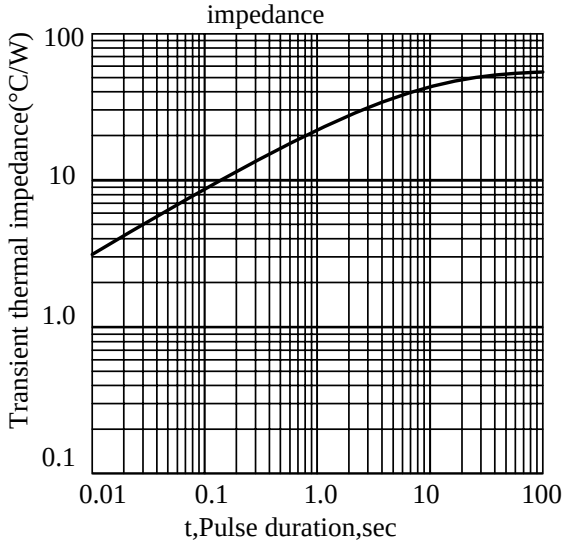
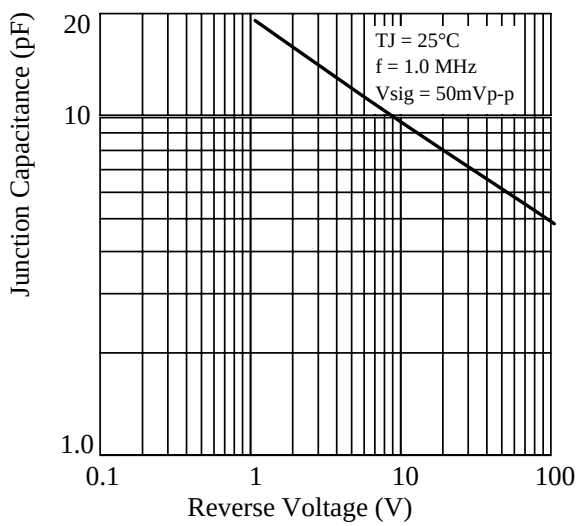
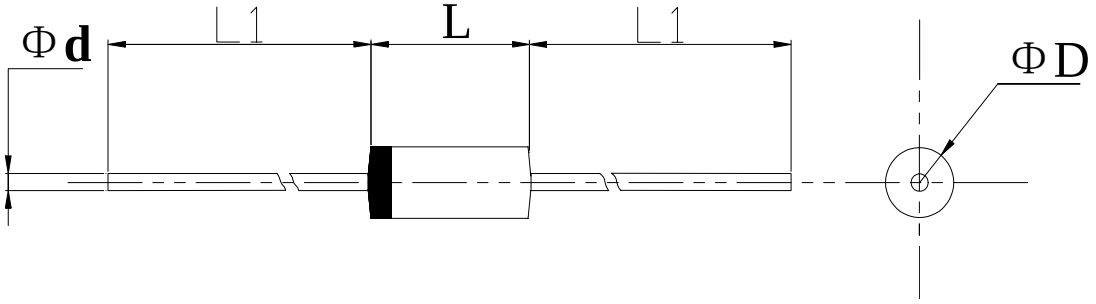


Fig 6. – Typical Junction Capacitance



5.Package Dimensions in inches and (millmeters)

Package outline



Dimensions				
	inches		mm	
	Min.	Max.	Min.	Max.
L	0.166	0.205	4.2	5.2
L1	1.0	-	25.4	-
ΦD	0.080	0.107	2.0	2.7
Φd	0.028	0.034	0.7	0.9

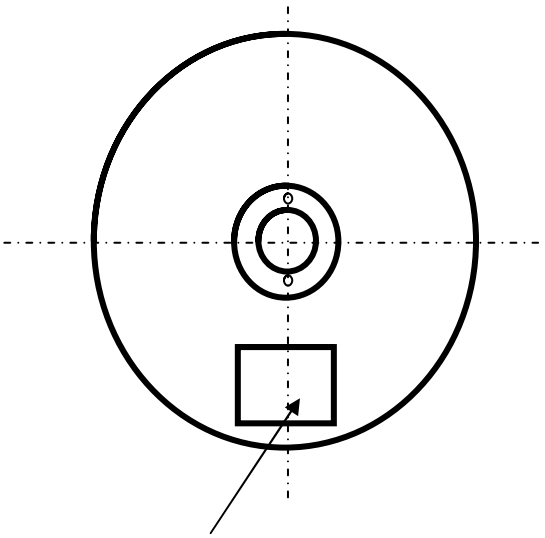
Note:
DO-41
molded plastic case
The marking band indicates the cathode

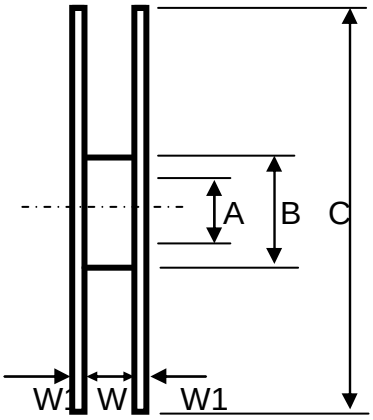
Packing Of Plastic-Sealed Axial Lead Diodes

1.卷盘/Reel Packing（52mm）

Unit:mm

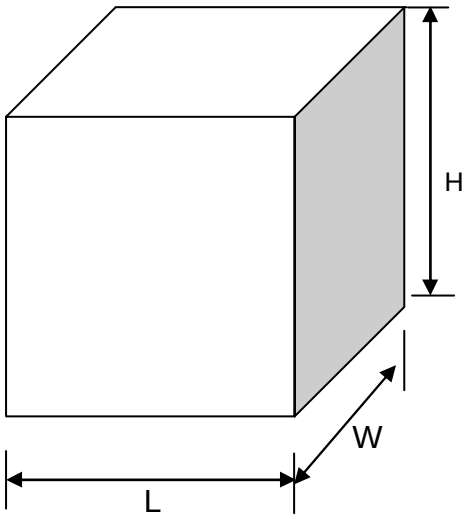
A：卷盘规格/Reel spec.





Item	Symbol	Dimension
Dimeter	A	76.4±0.1
	B	82.5±0.2
	C	330±0.5
Width	W	72±0.2
Thickness	W1	3±0.2

B：外箱规格/Outer Box Specification



Item	Symbol	Dimension
Size	L	350±2
	W	350±2
	H	340±4

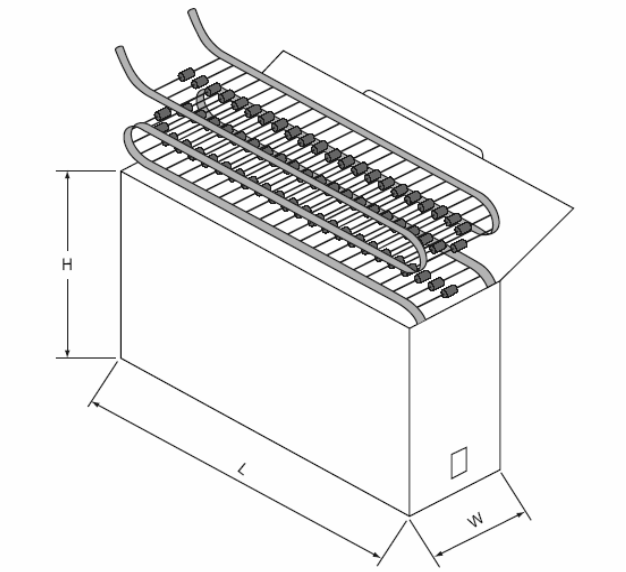
按以上包装方式：(As per the above spec)

	外型/Outside		
	DO-41 & A-405	DO-15	DO-201AD
Q'ty/Taping	5K	4K	1.4K
Q'ty/Packing Case	20K	16K	5.6K

2. 弹带盒装/Ammo Packing

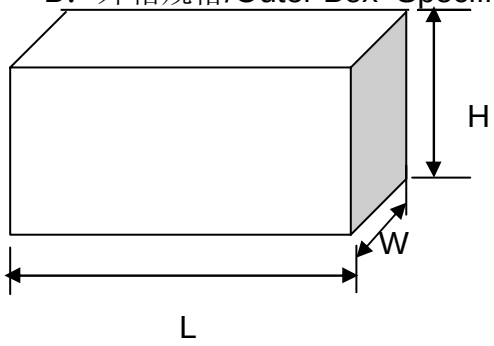
Unit:mm

A： 弹带盒规格/Ammo Box Spec.



Item	Symbol	Dimension	Notes
Box's Size	L	260±2	52mm TYPE
	W	76±2	
	H	100±4	
	L	250±3	26mm TYPE
	W	45±3	
	H	95±5	

B：外箱规格/Outer Box Specification



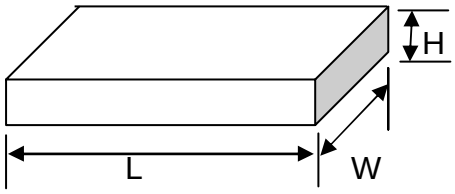
Item	Symbol	Dimension	Notes
Case's Size	L	430±2	52mm TYPE
	W	280±2	
	H	225±4	
	L	435±3	26mm TYPE
	W	280±3	
	H	295±5	

按以上包装方式：(As per the above spec)

	外型/Outside		
	A-405 & DO-41 & R-1	DO-15	DO-201AD
Q'ty/Taping	3K	2K	0.8K
Q'ty/Packing Case 26mm/TYPE	30K	20K	7.2K
Q'ty/Packing Case 52mm/TYPE	60K	40K	14.4K

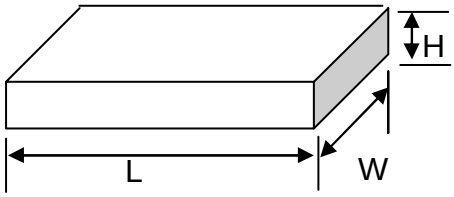
3. 散装/Bulk Packing

A.包装盒尺寸/Box Dimension



(DO-41&DO-15)

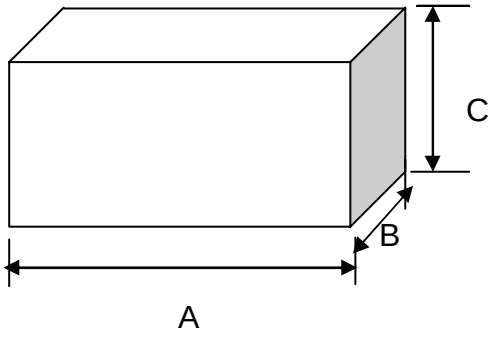
Item	Symbol	Dimension
Box's Size	L	200±2
	W	84±2
	H	21±2



(DO-201AD)

Item	Symbol	Dimension
Box's Size	L	200±2
	W	84±2
	H	29±2

B：外箱规格/Outer Box Specification

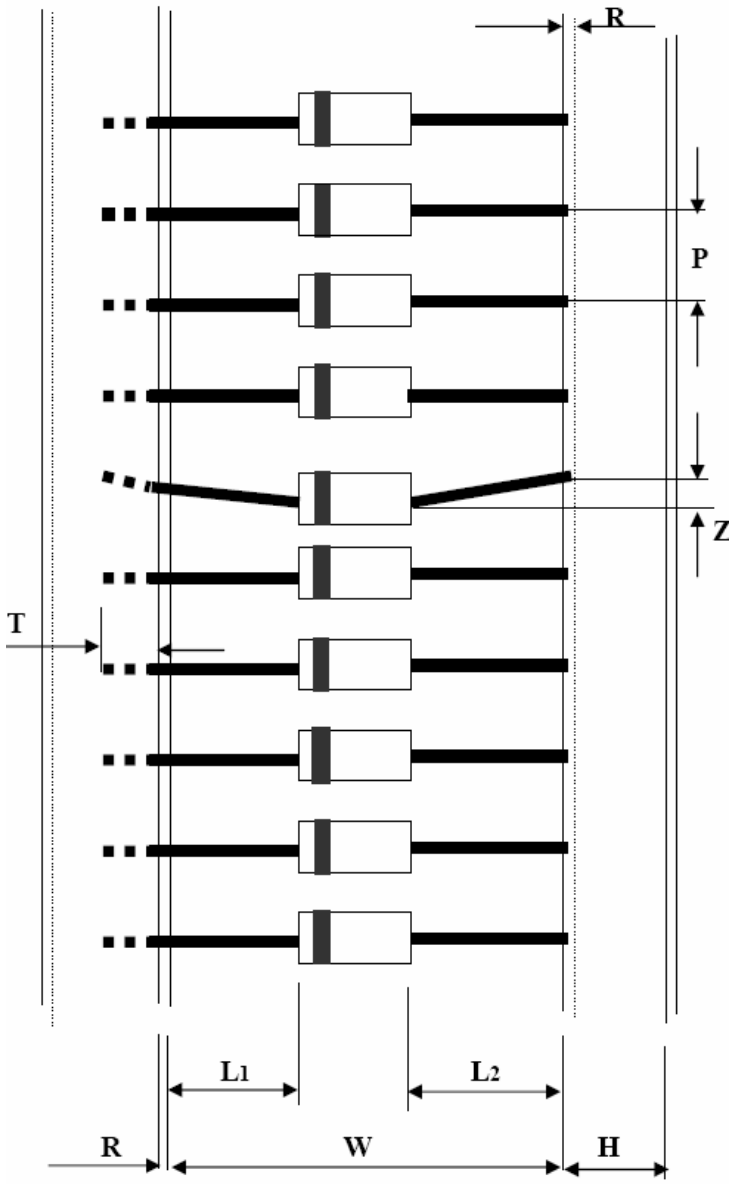


Item	Symbol	Dimension
Case's Size	L	465±2
	W	225±2
	H	260±4

按以上包装方式：(As per the above spec)

	外型/Outside		
	DO-41&A-405&R-1	DO-15	DO-201AD
Q'ty/Taping	1K	0.5K	0.3K
Q'ty/Packing Case	50K	25K	12K

4. 编带图形及规格/Taping Specification



Unit:mm

尺寸代号	编带尺寸/Tape Dimension		
Dimension Code	26/tape	52/tape	52/tape#
W	26 0.0/+1.6	52 -1.0/+2.0	52 -1.0/+2.0
P	5±0.5	5±0.5	10±0.5
L_1-L_2	＜1.0	＜1.2	＜1.2
H	6±1.0	6±1.0	6±1.0
Z	＜1.2	＜1.2	＜1.2
R	＜1.0	＜1.0	＜1.0
T	＞3.2	＞3.2	＞3.2

注： 52编带# 为DO-201AD编带规格

Remark: 52 tape# is DO-201AD taping spec.