TAK CHEONG®

SEMICONDUCTOR

350 mW DO-35 Hermetically Sealed Glass AFC / Trigger Diodes

AXIAL LEAD
DO35

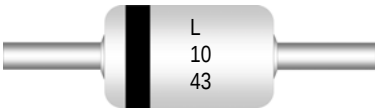
Absolute Maximum Ratings

T_A = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
P_D	Power Dissipation	350	mW
T_{STG}	Storage Temperature Range	-65 to +200	°C
T_J	Operating Junction Temperature	+175	°C

These ratings are limiting values above which the serviceability of the diode may be impaired.

DEVICE MARKING DIAGRAM



L = Logo
Device Code = FV1043

Specification Features:

- DO-35 Package (JEDEC)
- Through-Hole Device Type Mounting
- Hermetically Sealed Glass
- Compression Bonded Construction
- All external surfaces are corrosion resistant and leads are readily solderable
- Cathode indicated by polarity band

DEVICE MARKING DIAGRAM

L = Logo
Device Code = DB3

AFC-FV-1043 Electrical Characteristics

T_A = 25°C unless otherwise noted

Parameter	Test Condition	Limits			Unit
		Min	Typical	Max	
B_V	I_R = 5µA	5			Volts
Normal Capacitance	V_R = 5V	5			pF
C 0.1 **C 4.0**	V_R = 0.1V V_R = 4.0V		1.8		
Q	f = 100M_{HZ}	50			

Trigger - DB3 Electrical Characteristics

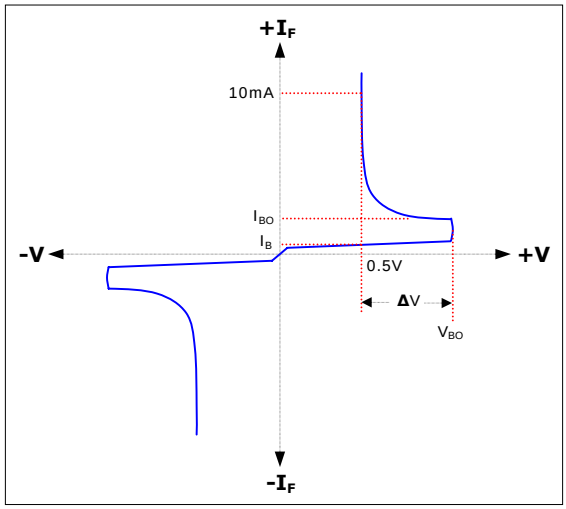
T_A = 25°C unless otherwise noted

Parameter	DB3			Unit
	Min	Typical	Max	
V_{BO}	28	32	36	Volts
$[V_{BO'}-V_{BO}]$			±3	Volts
$[\Delta V]$	5			Volts
V_O	5			Volts
I_{BO}			100	µA
T_R		1.5		µS
I_B			10	µA

Electrical Symbol Definition

Symbol	Parameter
B_V	Breakdown Voltage @ I_R
V_{BO}	Breakover Voltage @ I_{BO}
$[V_{BO'}-V_{BO}]$	V_{BO} Symmetry
$[\Delta V]$	Dynamic Breakover Voltage
V_O	Output Voltage
I_{BO}	Breakover Current
T_R	Rise Time
I_B	Leakage Current
I_F	Forward Current

Typical Characteristics



Ordering Information

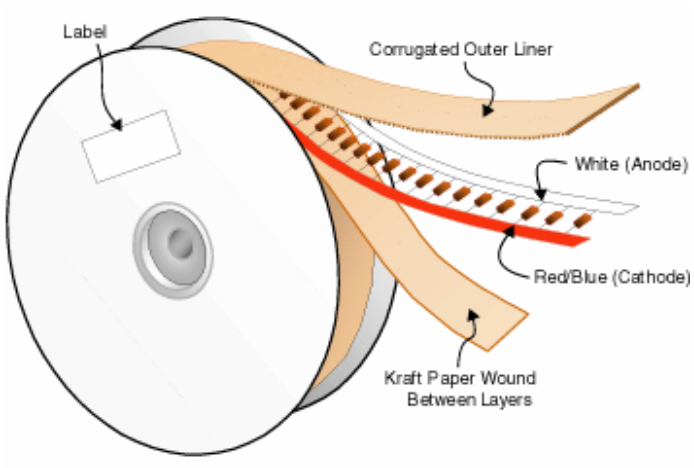
Device	Package	Quantity
FV-1043 / DB3	Bulk	10,000
FV-1043 / DB3.TB	Tape and Ammo	5,000
FV-1043 / DB3.TR	Tape and Reel	10,000
FV-1043 / DB3	Others (…contact sales representatives)	

Axial-Lead Tape Packaging Standards

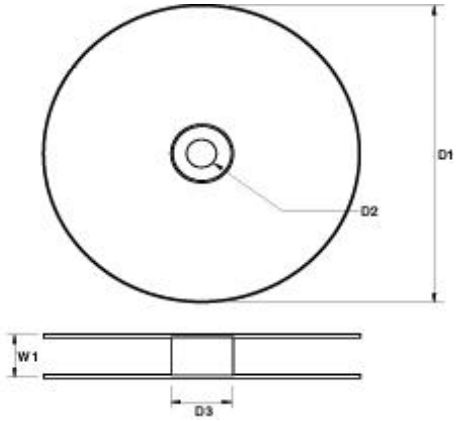
This axial-lead component's packaging requirements use in automatic testing and assembly equipment. And this standard practices for lead-tape packaging of axial-lead components meets the requirements of EIA Standard RS-296-D "Lead-taping of Components on Axial Lead Configuration for Automatic Insertion".

Tape & Reel Packaging Information

Tape & Reel Outline



Reel Dimensions

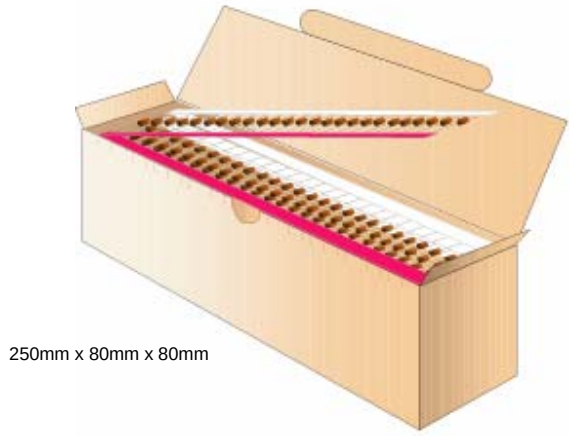


DIM	Millimeters
D1	356
D2	30
D3	84
W1	77.5

Quantity Per Reel

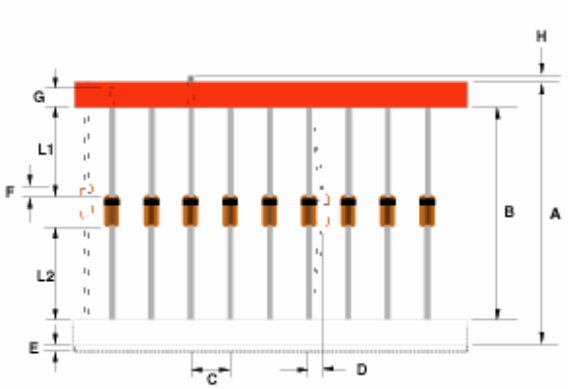
PKG Type	Quantity Per Reel
DO-35	10,000

Tape & Ammo Packaging Information

Tape & Ammo Outline	 250mm x 80mm x 80mm
Quantity Per Ammo Box	

PKG Type	Quantity Per Box
DO-35	5,000

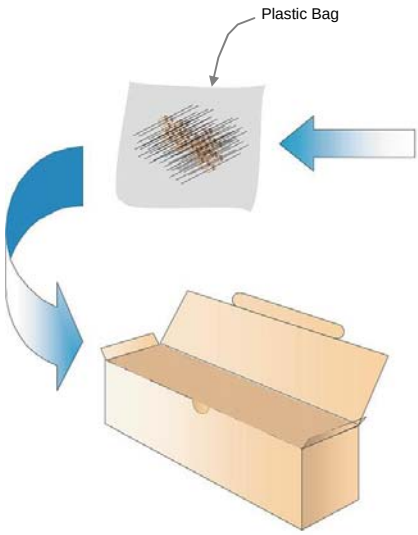
Taping Dimensions



Description	Millimeters	
Standard Width	52	26
Tape Spacing (B)	52 ± 0.69	26 +0.5 / -0
Component Pitch (C)	5.08 ± 0.4	5.08 ± 0.4
Untaped Lead (L1 – L2)	± 0.69	± 0.69
Glass Offset (F)	± 0.69	± 0.69
Bent (D)	1.2 Max	1.2 Max
Tape Width (G)	6.138 ± 0.576	6.138 ± 0.576
Tape Mismatch (E)	0.55 Max	0.55 Max
Taped Lead (G)	3.2 Min	3.2 Min
Lead Beyond Tape (H)	0	0

Bulk Packaging Information

Bulk Outline



250mm x 80mm x 80mm

Quantity Per Plastic Bag

DO-35	1000 x 10 Plastic Bag

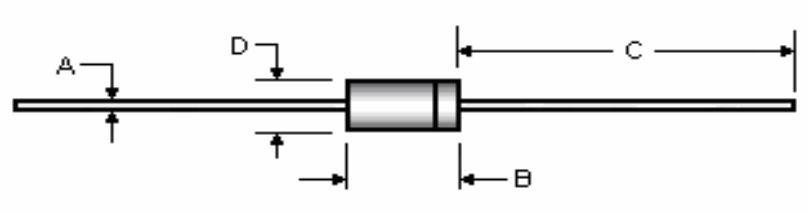
Quantity Per Box

PKG Type	Quantity Per Box
DO-35	10,000

Package Outline

Package	Case Outline

DO-35



DIM	DO-35			
	Millimeters		Inches	
	Min	Max	Min	Max
A	0.46	0.55	0.018	0.022
B	3.05	5.08	0.120	0.200
C	25.40	38.10	1.000	1.500
D	1.53	2.28	0.060	0.090

Notes:

1. All dimensions are within JEDEC standard.
2. DO35 polarity denoted by cathode band.