

TÜV MANAGEMENT SERVICE

An ISO/TS16949 and ISO 9001 Certified Company

## **FAST SWITCHING PLASTIC RECTIFIERS**



BA157, BA158, BA159

DO-41 (Plastic) Fast Switching Plastic Rectifiers

## Fast switching for higher efficiency

Absolute Maximum Ratings (Ratings at  $T_A$  = 25°C unless specified otherwise, Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.)

DESCRIPTION	SYMBOL	BA157	BA158	BA159	UNIT
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	400	600	1000	V
Maximum RMS Voltage	V <sub>RMS</sub>	280	420	700	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	400	600	1000	V
Maximum Average Forward Rectified					
Current 0.375" (9.5mm) lead length at T <sub>A</sub> =55°C	$I_{F(AV)}$		1.0		Α
Peak Forward Surge Current 8.3ms single half sine wave superimposed on rated load (JEDEC method)	I <sub>FSM</sub>	30		А	
Maximum Forward Voltage at 1A	$V_{F}$		1.3		V
Maximum Reverse Current T <sub>J</sub> = 25°C			5.0		μΑ
at Rated DC Blocking Voltage T <sub>J</sub> = 100°C	I <sub>R</sub>		500		μΑ
Typical Junction Capacitance (Note 1)	CJ	12		pF	
Maximum Reverse Recovery Time (Note 2)	t <sub>rr</sub>	1	150	250	ns
Operating and Storage Temperature Range	$T_J, T_{stg}$		-55 to +150		°C

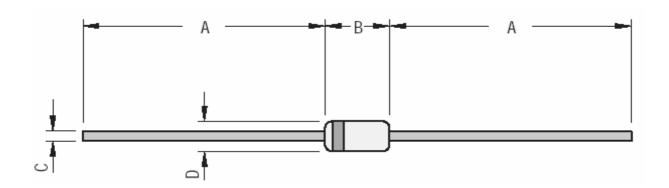
#### **NOTES:**

- 1. Measured at 1MHz and applied reverse voltage of 4.0 VDC
- 2. Reverse Recovery Test Conditions :  $I_F = 0.5A$ ,  $I_R = 1A$ ,  $I_{rr} = 0.25A$





# **DO-41P Axial Plastic Package**

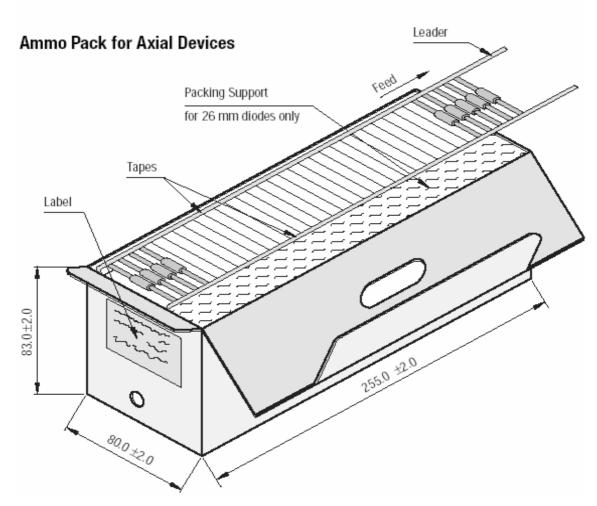


DIM	Min	Max		
Α	25.40			
В	4.20	5.20		
С	0.70	0.90		
D	2.00	2.70		

All Dimensions are in mm



## **AMMO PACKING FOR DO-41P**

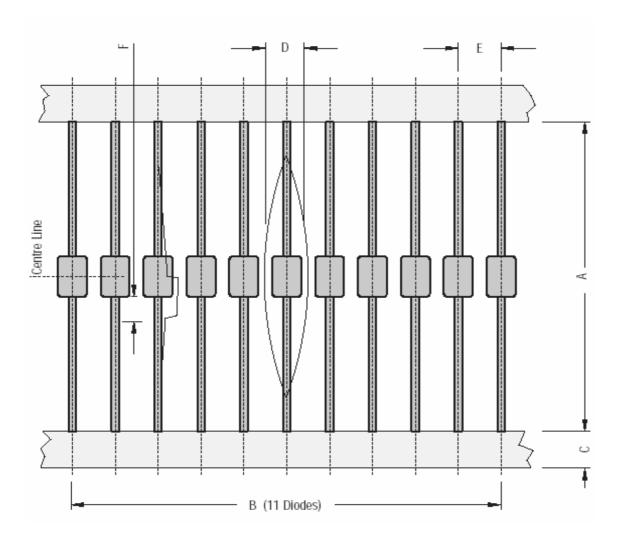


All Dimensions are in mm

# **Packaging Information**

Package/	Packaging Type	Std. Packing	Inner Carton			Outer Carton		
Case Type		Qty	Qty	Size L x W x H	<b>Gross Weight</b>	Qty	Size L x W x H	<b>Gross Weight</b>
				(cm)	(Kg)		(cm)	(Kg)
DO-41P	T&A	5,000	5K	27 x 8 x 14	1.96	45K	46 x 35 x 25	17.5

T & A: Tape and Ammo Pack



DO-41P 52 mm Tape						
DIM	Min	Max				
Α	50.0	54.0				
В	95.0	105.0				
С	5.60	6.50				
D		1.5R				
E	9.50	10.50				
F		1.25				

#### All Dimensions are in mm

## **TAPE SPECIFICATIONS**

- 1. 300 mm (Min) leader tape on every roll.
- 2. No. of empty places allowed 0.25% without consecutive empty places.
- 3. Ends of leads shall normally not protrude beyond the tapes.
- 4. Components shall be held sufficiently in the tape or tapes so that they can not come free in normal handling.

**Notes** 

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DO-41 (Plastic)
Fast Switching Plastic
Rectifiers

### **Disclaimer**

The product information and the selection guides facilitate selection of the CDIL's Semiconductor Device(s) best ited for application in your product(s) as per your requirement. It is recommended that you completely review our Data Sheet(s) so as to confirm that the Device(s) meet functionality parameters for your application. The information furnished in the Data Sheet and on the CDIL Web Site/CD are believed to be accurate and reliable. CDIL however, does not assume responsibility for inaccuracies or incomplete information. Furthermore, CDIL does not assume liability whatsoever, arising out of the application or use of any CDIL product; neither does it convey any license under its patent rights nor rights of others. These products are not designed for use in life saving/support appliances or systems. CDIL customers selling these products (either as individual Semiconductor Devices or incorporated in their end products), in any life saving/support appliances or systems applications do so at their own risk and CDIL will not be responsible for any damages resulting from such sale(s).

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