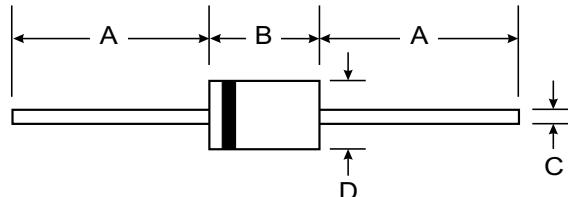


**VOLTAGE RANGE: 50 - 1000V**
**CURRENT: 1.0 A**
**Features**

- Miniature axial leaded
- Glass passivated
- Hermetically sealed glass envelope
- Low reverse current
- High reverse voltage

**Mechanical Data**

- Case : DO-15 Molded plastic
- Epoxy : UL94V-O rate flame retardant
- Lead : Axial lead solderable per MIL-STD-202, Method 208 guaranteed
- Polarity : Color band denotes cathode end
- Mounting position : Any
- Weight : 0.465 gram



DO-15		
Dim	Min	Max
A	25.40	—
B	5.50	7.62
C	0.686	0.889
D	2.60	3.60

All Dimensions in mm

**Maximum Ratings**  $T_A = 25^\circ\text{C}$  unless otherwise specified

Parameter	Test Conditions	Type	Symbol	Value	Unit
Reverse voltage =Repetitive peak reverse voltage		BYT43A	$V_R$	50	V
		BYT43B	$=V_{RRM}$	100	V
		BYT43D		200	V
		BYT43G		400	V
		BYT43J		600	V
		BYT43K		800	V
		BYT43M		1000	V
Peak forward surge current	$t_p=8.3 \text{ ms, half sinewave}$		$I_{FSM}$	30	A
Average forward current	Lead length $l = 10 \text{ mm}$ , $T_L = 25^\circ\text{C}$		$I_{FAV}$	1	A
Junction and storage temperature range			$T_j=T_{stg}$	-55...+175	°C

**Maximum Thermal Resistance**
 $T_j = 25^\circ\text{C}$ 

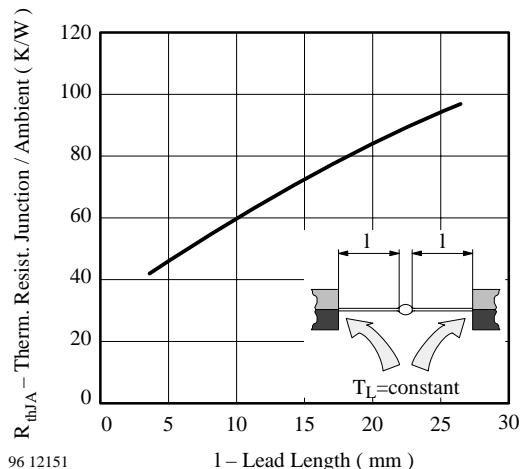
Parameter	Test Conditions	Symbol	Value	Unit
Junction ambient	Lead length $l = 10 \text{ mm}$ , $T_L = \text{constant}$	$R_{thJA}$	60	K/W
	on PC board with spacing 25mm	$R_{thJA}$	110	K/W

## Electrical Characteristics

$T_j = 25^\circ\text{C}$

Parameter	Test Conditions	Type	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F = 1 \text{ A}$	BYT43A -BYT43J	$V_F$			1.6	V
		BYT43K -BYT43M	$V_F$			2	V
Reverse current	$V_R = V_{RRM}$		$I_R$			5	$\mu\text{A}$
	$V_R = V_{RRM}, T_j = 150^\circ\text{C}$		$I_R$			150	$\mu\text{A}$
Reverse breakdown voltage	$I_R = 100 \mu\text{A}$	BYT43A	$V_{(BR)R}$	50			V
		BYT43B	$V_{(BR)R}$	100			V
		BYT43D	$V_{(BR)R}$	200			V
		BYT43G	$V_{(BR)R}$	400			V
		BYT43J	$V_{(BR)R}$	600			V
		BYT43K	$V_{(BR)R}$	800			V
		BYT43M	$V_{(BR)R}$	1000			V
Reverse recovery time	$I_F = 0.5 \text{ A}, I_R = 1 \text{ A}, I_{RR} = 0.25 \text{ A}$	BYT43A -BYT43J	$t_{rr}$			50	ns
		BYT43K -BYT43M	$t_{rr}$			75	ns

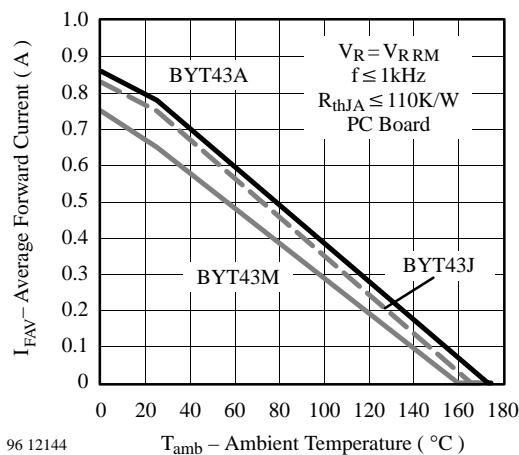
## Characteristics ( $T_j = 25^\circ\text{C}$ unless otherwise specified)



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1 – Lead Length ( mm )

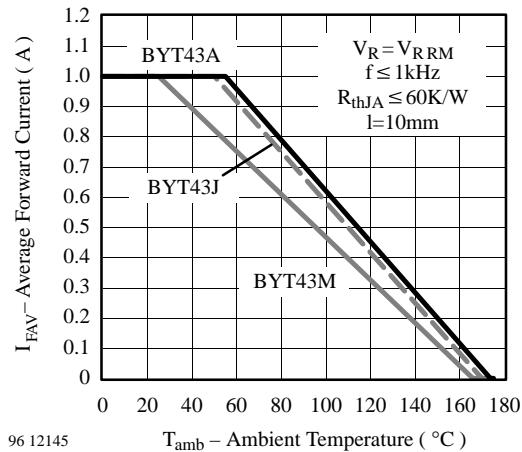
Figure 1. Max. Thermal Resistance vs. Lead Length



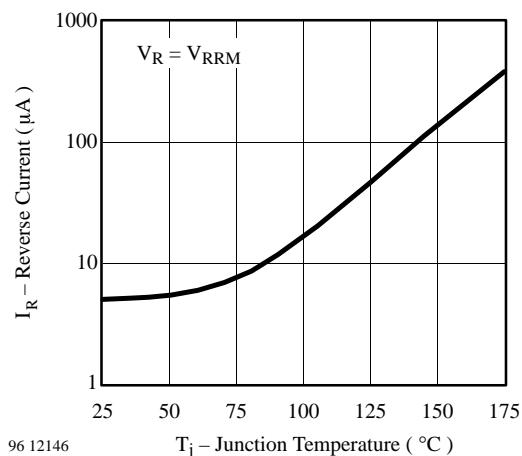
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$T_{amb}$  – Ambient Temperature (  $^\circ\text{C}$  )

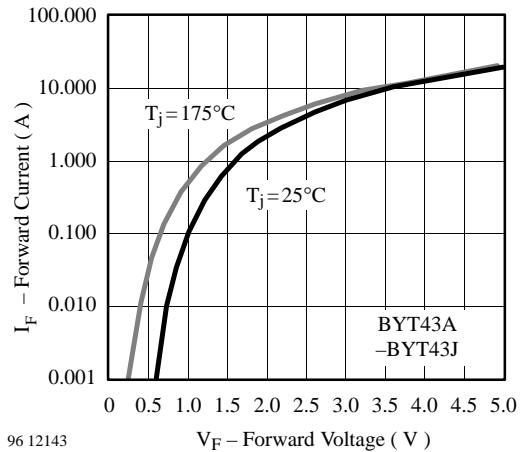
Figure 2. Max. Average Forward Current vs. Ambient Temperature



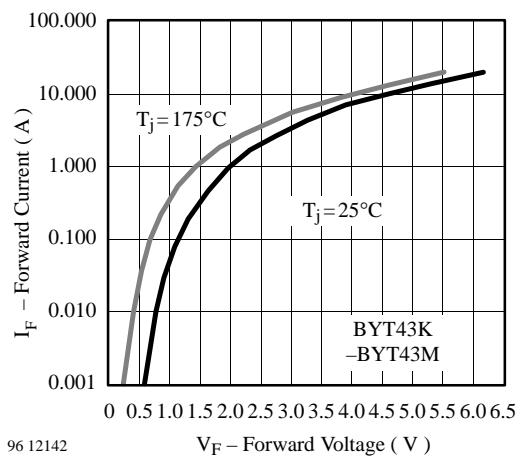
**Figure 3.** Max. Average Forward Current vs. Ambient Temperature



**Figure 4.** Max. Reverse Current vs. Junction Temperature



**Figure 5.** Max. Forward Current vs. Forward Voltage



**Figure 6.** Max. Forward Current vs. Forward Voltage