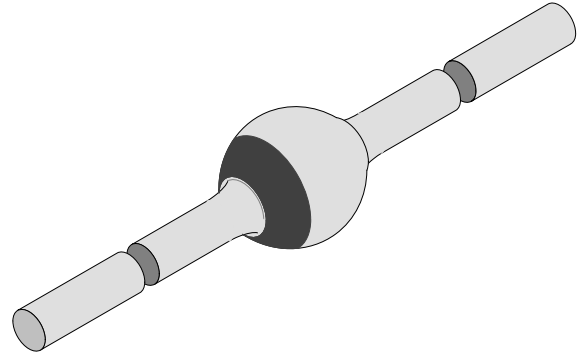


Features

- ✧ Glass passivated junction
- ✧ Hermetically sealed package
- ✧ Low reverse current
- ✧ Soft recovery characteristics

Applications

Very fast rectifiers and switches



Absolute Maximum Ratings

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

Parameter	Test Conditions	Type	Symbol	Value	Unit
Reverse voltage =Repetitive peak reverse voltage		BYT56A	$V_R=V_{RRM}$	50	V
		BYT56B	$V_R=V_{RRM}$	100	V
		BYT56D	$V_R=V_{RRM}$	200	V
		BYT56G	$V_R=V_{RRM}$	400	V
		BYT56J	$V_R=V_{RRM}$	600	V
		BYT56K	$V_R=V_{RRM}$	800	V
		BYT56M	$V_R=V_{RRM}$	1000	V
Peak forward surge current	$t_p=10\text{ms}$, half sinewave		I_{FSM}	80	A
Average forward current	on PC board		I_{FAV}	1.5	A
	$l=10\text{mm}$, $T_L=25^\circ\text{C}$		I_{FAV}	3	A
Junction and storage temperature range			$T_j=T_{stg}$	-65...+175	$^\circ\text{C}$

Maximum Thermal Resistance

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

Parameter	Test Conditions	Symbol	Value	Unit
Junction ambient	$l=10\text{mm}$, $T_L=\text{constant}$	R_{thJA}	25	K/W
	on PC board with spacing 37.5mm	R_{thJA}	70	K/W

Electrical Characteristics

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

Parameter	Test Conditions	Type	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F=3\text{A}$		V_F			1.4	V
Reverse current	$V_R=V_{RRM}$		I_R			5	μA
	$V_R=V_{RRM}$, $T_j=150^\circ\text{C}$		I_R			150	μA
Reverse recovery time	$I_F=0.5\text{A}$, $I_R=1\text{A}$, $i_R=0.25\text{A}$		t_{rr}			100	ns

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

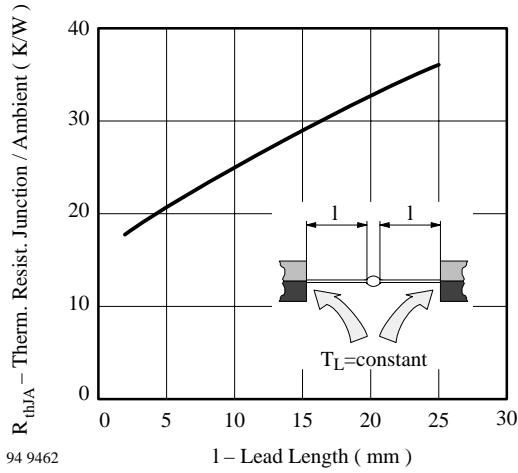


Figure 1. Max. Thermal Resistance vs. Lead Length

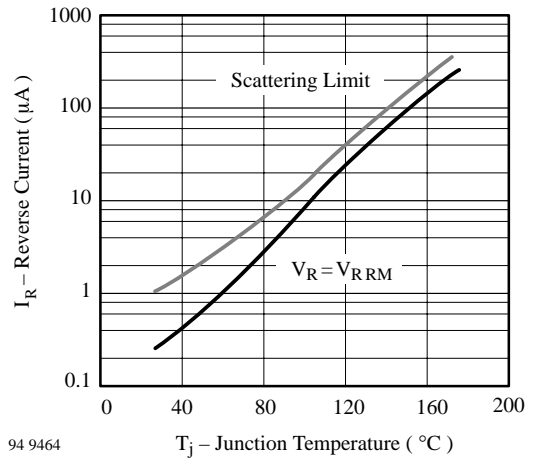


Figure 4. Reverse Current vs. Junction Temperature

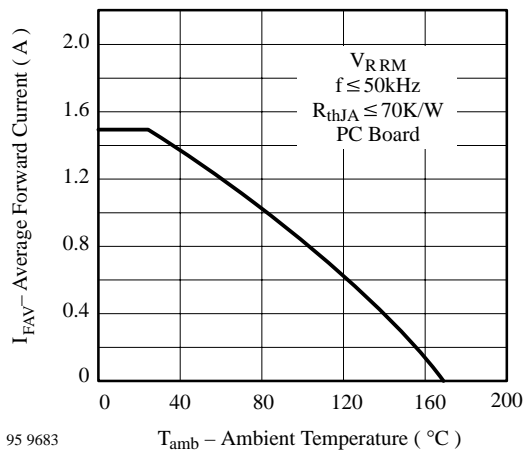


Figure 2. Max. Average Forward Current vs. Ambient Temperature

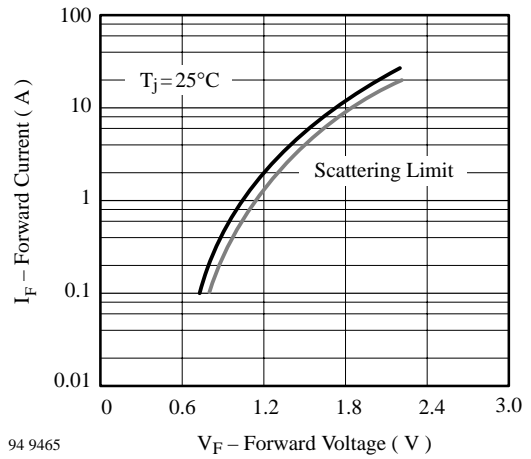


Figure 5. Forward Current vs. Forward Voltage

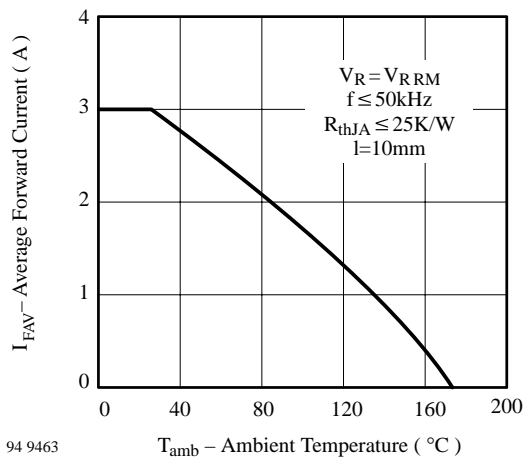


Figure 3. Max. Average Forward Current vs. Ambient Temperature

Dimensions in mm

