

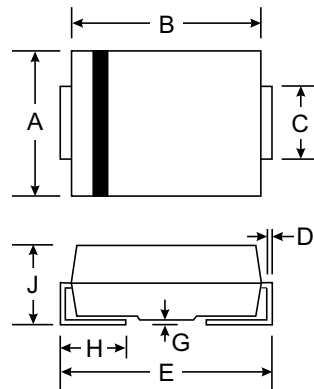
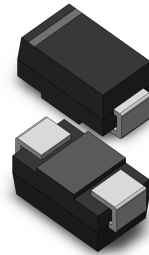
VOLTAGE RANGE: 25 - 45V
CURRENT: 1.5 A

Features

- High efficiency
- Low power losses
- Very low switching losses
- Low reverse current
- High surge capability

Mechanical Data

- Case: SMA/DO-214AC, Molded Plastic
- Terminals: Solder Plated, Solderable per MIL-STD-750, Method 2026
- Polarity: Cathode Band or Cathode Notch
- Marking: Type Number
- Weight: 0.064 grams (approx.)



SMA(DO-214AC)		
Dim	Min	Max
A	2.29	2.92
B	4.00	4.60
C	1.27	1.63
D	0.15	0.31
E	4.80	5.59
G	0.10	0.20
H	0.76	1.52
J	2.01	2.62

All Dimensions in mm

Maximum Ratings @ T_A = 25°C unless otherwise specified

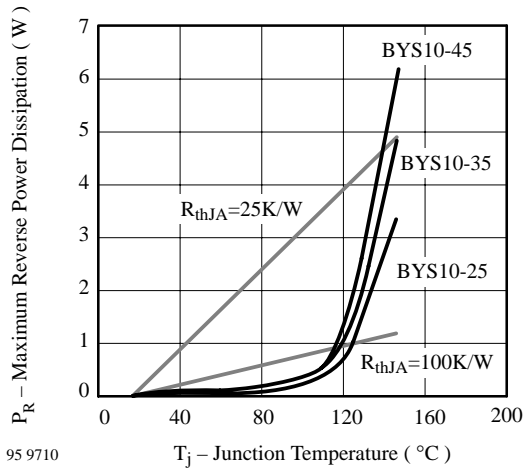
Parameter	Test Conditions	Type	Symbol	Value	Unit
Reverse voltage =Repetitive peak reverse voltage		BYS10-25	V _R =V _{RRM}	25	V
		BYS10-35		35	V
		BYS10-45		45	V
Peak forward surge current	t _p =10ms, half sinewave		I _{FSM}	30	A
Average forward current			I _{FAV}	1.5	A
Junction and storage temperature range			T _j =T _{stg}	-55...+150	°C

Maximum Thermal Resistance @ T_A = 25°C unless otherwise specified

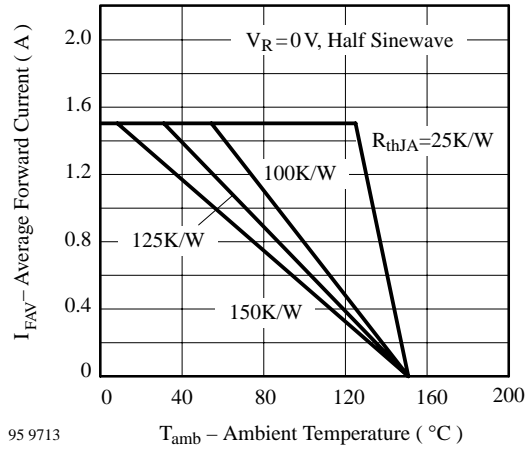
Parameter	Test Conditions	Symbol	Value	Unit
Junction lead	T _L =constant	R _{thJL}	25	K/W
Junction ambient	mounted on epoxy-glass hard tissue	R _{thJA}	150	K/W
	mounted on epoxy-glass hard tissue, 50mm ² 35μm Cu	R _{thJA}	125	K/W
	mounted on Al-oxid-ceramic (Al ₂ O ₃), 50mm ² 35μm Cu	R _{thJA}	100	K/W

Electrical Characteristics @ T_A = 25°C unless otherwise specified

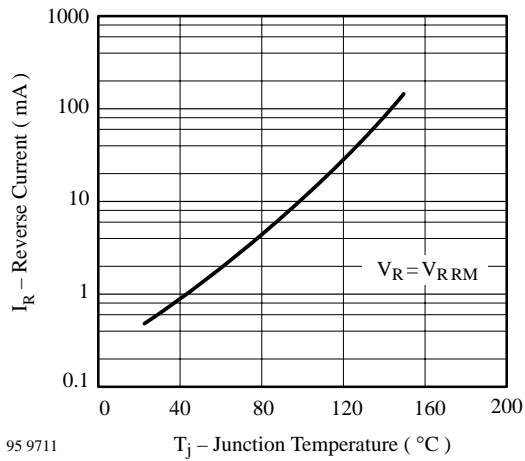
Parameter	Test Conditions	Type	Symbol	Min	Typ	Max	Unit
Forward voltage	I _F =1A		V _F			500	mV
Reverse current	V _R =V _{RRM}		I _R			500	μA
	V _R =V _{RRM} , T _j =100°C		I _R			10	mA



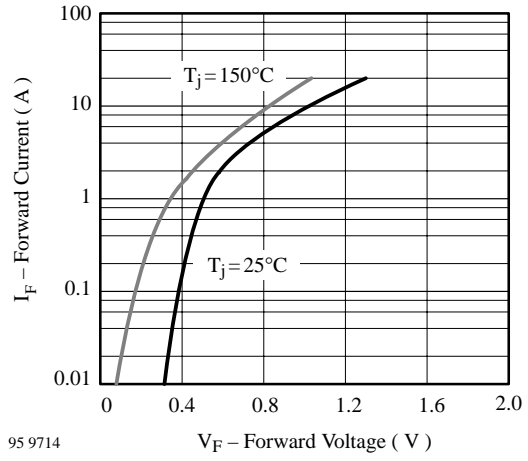
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 Figure 1. Max. Reverse Power Dissipation vs. Junction Temperature



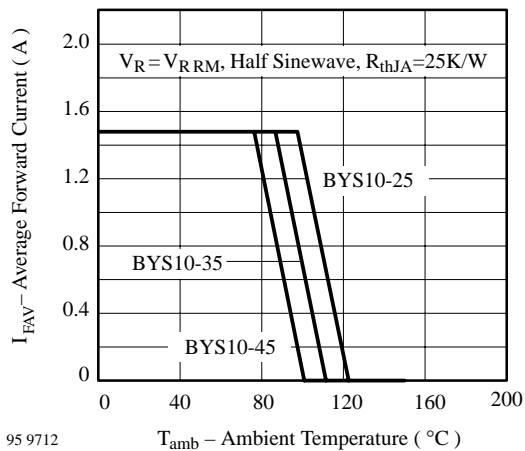
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 Figure 4. Max. Average Forward Current vs. Ambient Temperature



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 Figure 2. Max. Reverse Current vs. Junction Temperature



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 Figure 5. Max. Forward Current vs. Forward Voltage



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