

VOLTAGE RANGE: 200 - 1000V

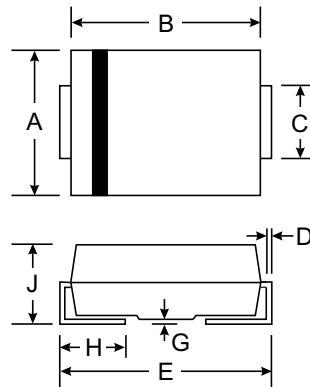
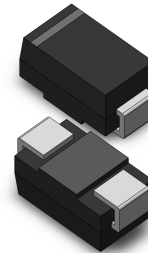
CURRENT: 1.5 A

Features

- Controlled avalanche characteristics
- Glass passivated junction
- Low reverse current
- High surge current capability
- Wave and reflow solderable

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		BYG10D	$V_R=V_{RRM}$	200	V
		BYG10G	$V_R=V_{RRM}$	400	V
		BYG10J	$V_R=V_{RRM}$	600	V
		BYG10K	$V_R=V_{RRM}$	800	V
		BYG10M	$V_R=V_{RRM}$	1000	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
Pulse energy in avalanche mode, non repetitive (inductive load switch off)	$I_{(BR)R}=1A$, $T_j=25^\circ C$		E_R	20	mJ

Maximum Thermal Resistance $jT = 25C$

Parameter	Test Conditions	Symbol	Value	Unit
Junction lead	$T_L=const.$	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 $jT = 25C$

Parameter	Test Conditions	Type	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F=1A$		V_F			1.1	V
	$I_F=1.5A$		V_F			1.15	V
Reverse current	$V_R=V_{RRM}$		I_R			1	μA
	$V_R=V_{RRM}$, $T_j=100^\circ C$		I_R			10	μA
Reverse recovery time	$I_F=0.5A$, $I_R=1A$, $i_R=0.25A$		t_{rr}			4	μs

RATINGS AND CHARACTERISTIC CURVES BYG10D THRU BYG10M

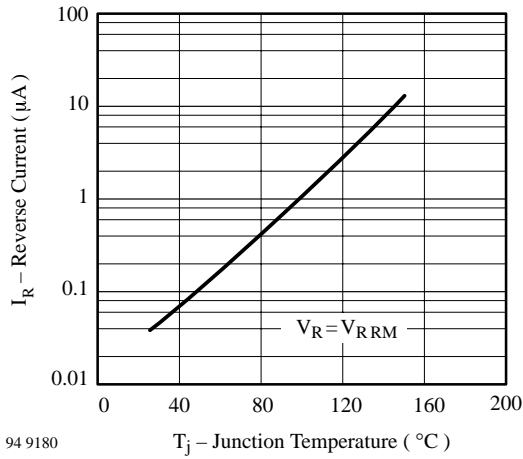


Figure 1. Typ. Reverse Current vs. Junction Temperature

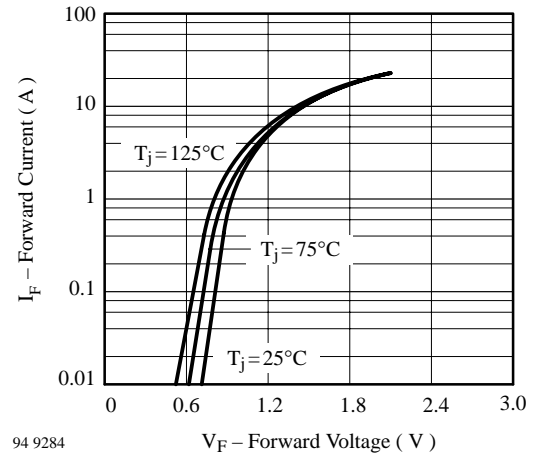


Figure 3. Typ. Forward Current vs. Forward Voltage

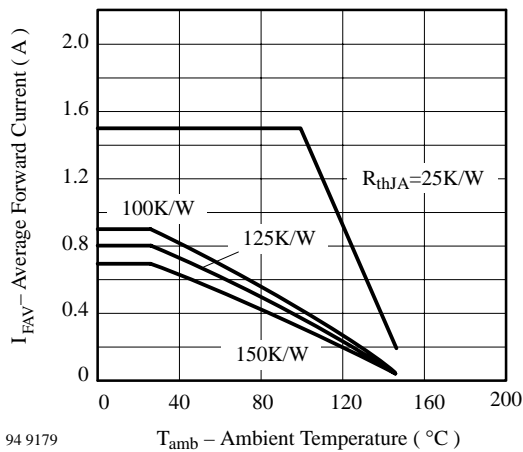


Figure 2. Max. Average Forward Current vs. Ambient Temperature

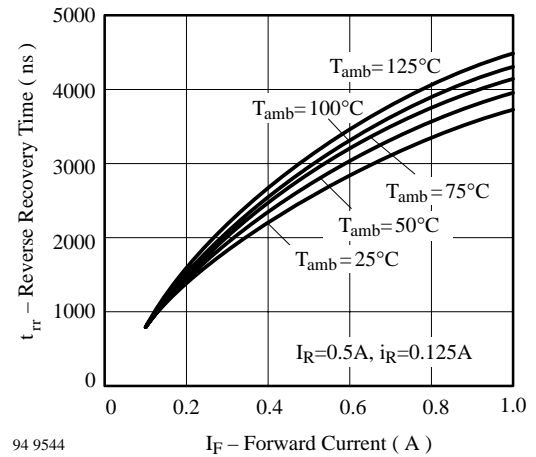


Figure 4. Typ. Reverse Recovery Time vs. Forward Current

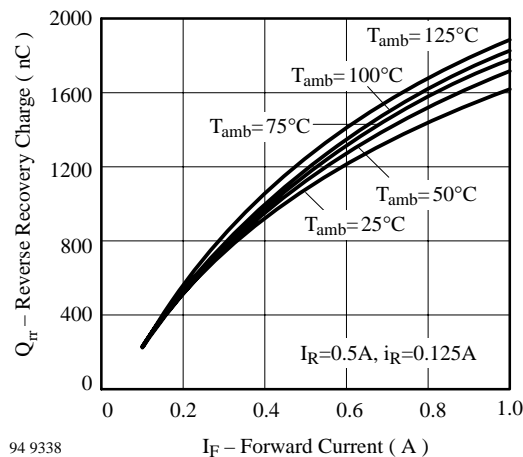


Figure 5. Typ. Reverse Recovery Charge vs. Forward Current