

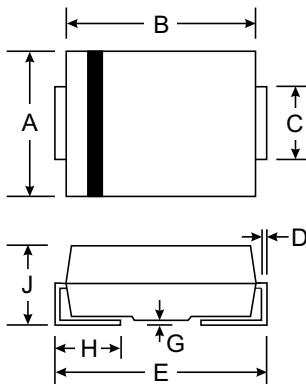
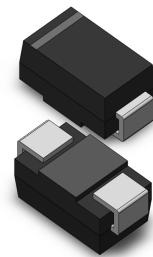
**VOLTAGE RANGE: 90V**  
**CURRENT: 1.5 A**

### 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 @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Parameter	Test Conditions	Type	Symbol	Value	Unit
Reverse voltage= Repetitive peak reverse voltage			$V_R = V_{RRM}$	90	V
Peak forward surge current	$t_p=10\text{ms}$ , 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  $T_j = 25^\circ\text{C}$

Parameter	Test Conditions	Symbol	Value	Unit
Junction lead	$T_L=\text{constant}$	$R_{thJL}$	25	K/W
Junction ambient	mounted on epoxy-glass hard tissue	$R_{thJA}$	150	
	mounted on epoxy-glass hard tissue, 50mm <sup>2</sup> 35μm Cu		125	
	mounted on Al-oxid-ceramic (Al <sub>2</sub> O <sub>3</sub> ), 50mm <sup>2</sup> 35μm Cu		100	

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

Parameter	Test Conditions	Type	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F=1\text{A}$	$V_F$				750	mV
	$I_F=15\text{mA}$					360	
Reverse current	$V_R=V_{RRM}$	$I_R$				100	μA
	$V_R=V_{RRM}, T_j=100^\circ\text{C}$					1	

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

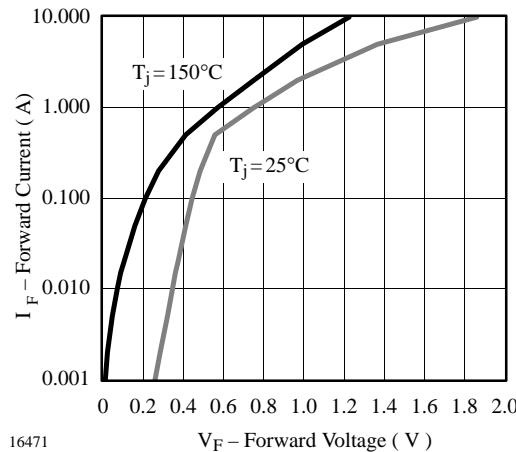


Figure 1. Forward Current vs. Forward Voltage

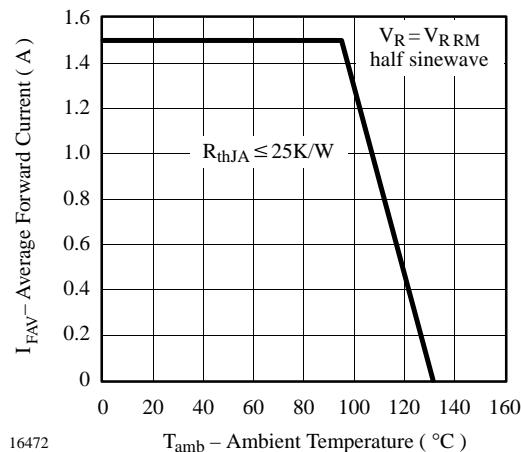


Figure 2. Max. Average Forward Current vs. Ambient Temperature

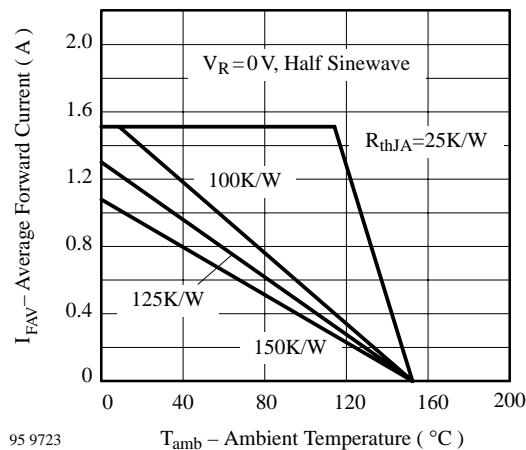


Figure 3. Max. Average Forward Current vs. Ambient Temperature

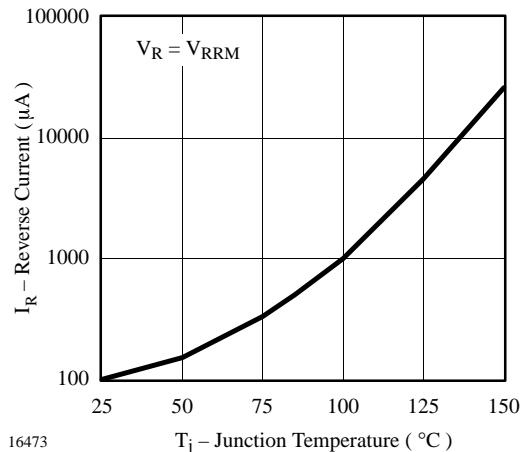


Figure 4. Reverse Current vs. Junction Temperature

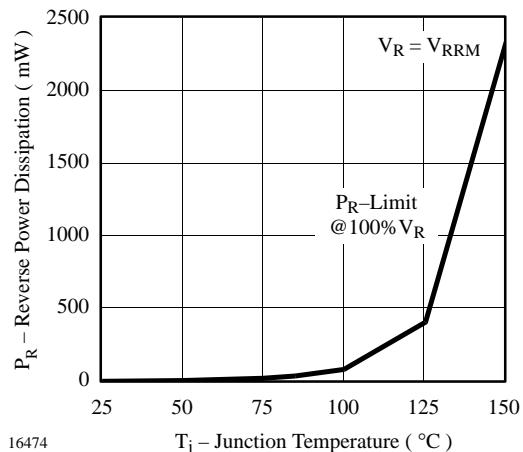


Figure 5. Max. Reverse Power Dissipation vs. Junction Temperature

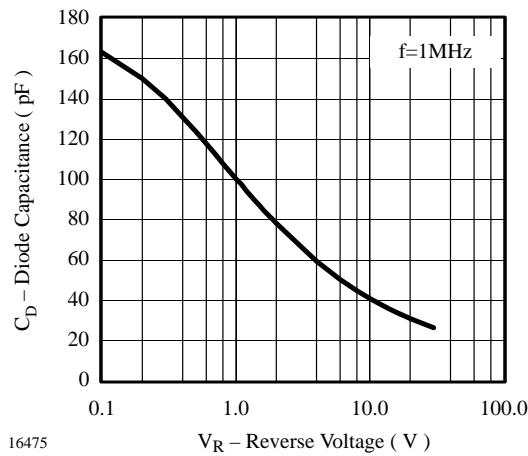


Figure 6. Diode Capacitance vs. Reverse Voltage