# **SUPER FAST RECTIFIERS**

Reverse Voltage - 600 V Forward Current - 1 A

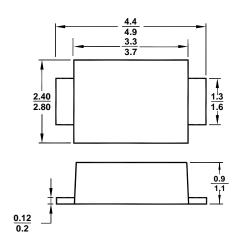
## **Features**

- Low cost
- Low forward voltage drop
- · High current capability

## **Mechanical Data**

· Case: SMAF

 Terminals: Solder plated, solderable per MIL-STD-750, Method 2026



**SMAF** 

All Dimensions in mm

# **Maximum Ratings and Electrical Characteristics**

Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half-wave, 50 Hz, resistive or inductive load, for capacitive load, derate current by 20%.

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Parameter -	Symbols	BYV26CF	Units
	Marking	26C	-
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	600	V
Maximum RMS Voltage	V <sub>RMS</sub>	420	V
Maximum DC Blocking Voltage	$V_{DC}$	600	V
Maximum Average Forward Rectified Current at $T_A = 65$ °C	I <sub>F(AV)</sub>	1	А
Peak Forward Surge Current 10 ms Single Half Sine Wave Superimposed on Rated Load at $T_J$ = 125 °C	I <sub>FSM</sub>	30	А
Maximum Forward Voltage at 1 A $T_J = 25 ^{\circ}\text{C}$ $T_J = 175 ^{\circ}\text{C}$	\/_	2.5 1.3	V
Maximum Reverse Current $T_A = 25 ^{\circ}\text{C}$ at Rated DC Blocking Voltage $T_A = 100 ^{\circ}\text{C}$	I_	5 150	μΑ
Maximum Reverse Recovery Time 1)	t <sub>rr</sub>	35	ns
Typical Junction Capacitance 2)	CJ	45	pF
Typical Thermal Resistance 3)	$R_{ heta JA}$	100	°C/W
Operating Junction temperature range	T <sub>j</sub>	- 55 to + 150	°C
Storage temperature range	T <sub>stg</sub>	- 55 to + 150	°C

 $<sup>^{1)}</sup>$  Reverse recovery test conditions:  $I_F$  = 0.5 A,  $I_R$  = 1 A,  $I_{rr}$  = 0.25 A.

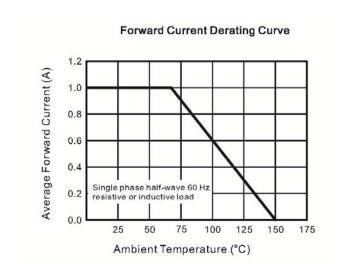






<sup>&</sup>lt;sup>2)</sup> Measured at 1 MHz and applied reverse voltage of 4 V D.C.

<sup>&</sup>lt;sup>3)</sup> Thermal resistance from junction to ambient.



## TYPICAL FORWARD CHARACTERISTIC

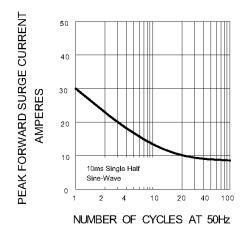
2.0 2 CORWARD COURRENT

AMPERES

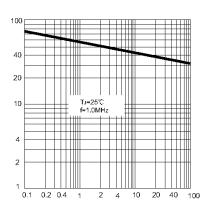
1.0 1.0 2.0 3.0 4.0

INSTANTANEOUS FORWARD VOLTAGE, VOLTS

### PEAK FORWARD SURGE CURRENT



### TYPICAL JUNCTION CAPACITANCE



JUNCTION CAPACITANCE, pF

REVERSE VOLTAGE, VOLTS





