

Ordering Information	
Part Number	Remark
SSXF	General
SSXF-H	Halogen Free
SSXF-Q	Automotive

PRIMARY CHARACTERISTICS	
$I_F$	5A
$V_{RRM}$	20~200V
$I_{FSM}$	100A
$V_F$	0.55V, 0.70V, 0.85V, 0.87V, 0.90V
$T_J \text{ max}$	125°C , 150°C

### DO-221AC(SMAF)

Dimensions in inches and (millimeters)

#### Features

- Low profile package
- Ideal for automated placement
- Guard Ring for over voltage protection
- Low forward voltage drop
- Component in accordance to RoHS 2002/95/EC
- AEC-Q101 qualified

#### Mechanical Data

- Case: DO-221AC (SMAF)
- Case Material: Molded Plastic. UL Flammability Classification Rating 94V-0
- Terminals: Lead Free Plating (Tin Finish). Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.032 grams (approximate)

#### MAXIMUM RATINGS (TA=25°C unless otherwise noted)

PARAMETER	SYMBOL	SS5 2F	SS5 3F	SS5 4F	SS5 5F	SS5 6F	SS5 8F	SS5 10F	SS5 15F	SS5 20F	UNIT
Maximum repetitive peak reverse voltage	$V_{RRM}$	20	30	40	50	60	80	100	150	200	V
Maximum RMS voltage	$V_{RMS}$	14	21	28	35	42	56	70	105	140	V
Maximum DC blocking voltage	$V_{DC}$	20	30	40	50	60	80	100	150	200	V
Maximum average forward rectified current	$I_F$	5.0									A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	$I_{FSM}$	100.0									A
Maximum Instantaneous Forward Voltage IF=5A @ 25°C	$V_F$	0.55			0.70		0.85		0.87	0.90	V
Maximum DC Reverse Current @ Tc=25°C at Rated DC Blocking Voltage @ Tc=100°C	$I_R$	0.5 10					0.2 5.0				mA
Typical Junction Capacitance(NOTE1)	$C_j$	300			210		170		150	110	pF
Typical Thermal Resistance(NOTE2)	$R_{\theta Ja}$ $R_{\theta Jc}$	120 90									°C/W
Operating Temperature Range	$T_J$	-55 to +125					-55 to +150				°C
Storage Temperature Range	$T_{STG}$	-55 to +150									°C

#### NOTES:

1. Measured at 1.0MHZ and applied reverse voltage of 4.0V DC
2. Device mounted on FR-4 substrate, 1"\*1", 2oz, single-sided, PC boards with 0.1"\*0.15" copper pad.

FIG. 1-TYPICAL FORWARD CURRENT DERATING CURVE

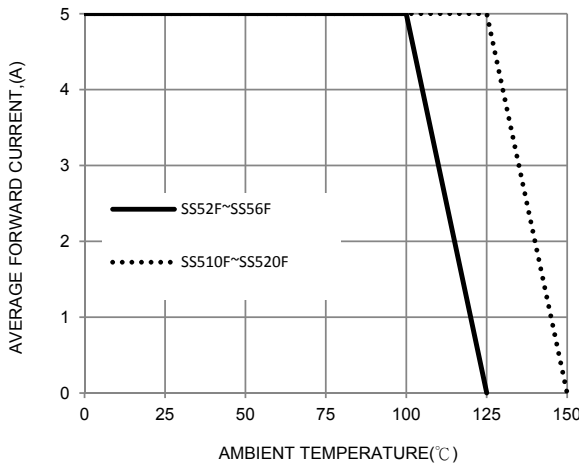


FIG. 2-TYPICAL FORWARD CHARACTERISTICS

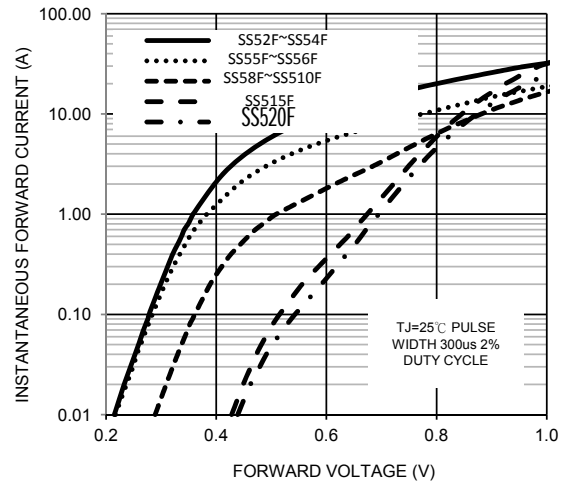


FIG. 3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

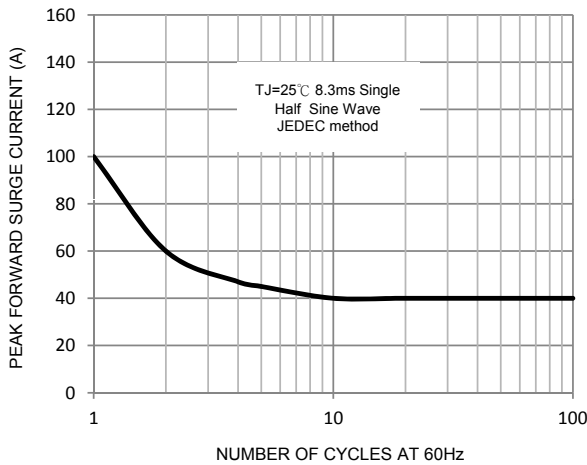


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

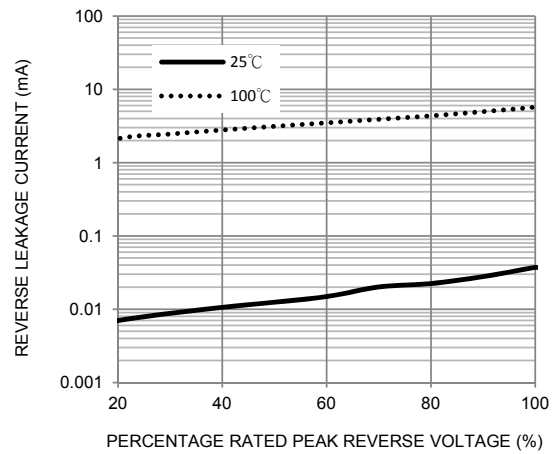


FIG. 5-TYPICAL JUNCTION CAPACITANCE

