Elektronische Bauelemente

SEF105AS

600 V 1.0 Amp

High Efficiency Recovery Rectifiers

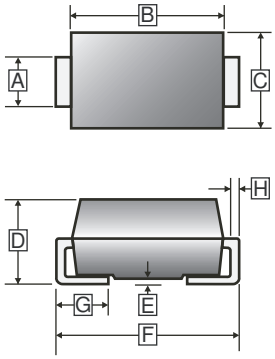
RoHS Compliant Product

A suffix of “-C” specifies halogen-free and RoHS Compliant

FEATURES

- Surface mount device
- High surge current capability
- Low reverse current

SMA



REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	1.24	1.65	E	-	0.203
B	3.99	4.60	F	4.80	5.28
C	2.40	2.90	G	0.76	1.52
D	1.90	2.44	H	0.15	0.305

MECHANICAL DATA

- Cases：DO-214AC(SMA)
- 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：0.064 grams(approximate)

PACKAGE INFORMATION

Package	MPQ	Leader Size
SMA	5K	13 inch

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

(Rating 25°C ambient temperature unless otherwise specified. Single phase half wave, 60Hz, resistive or inductive load.
For capacitive load, de-rate current by 20%)

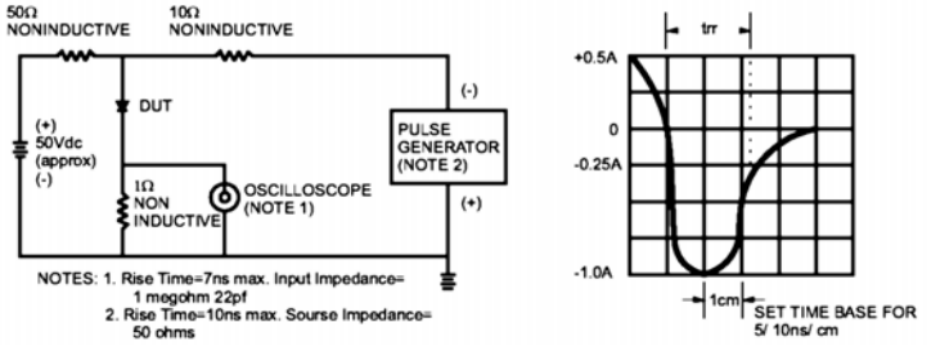
Parameter		Symbol	Part Number	Unit
Maximum repetitive peak reverse voltage		V_{RRM}	600	V
Maximum RMS voltage		V_{RMS}	420	V
Maximum DC blocking voltage		V_{DC}	600	V
Maximum average forward rectified current see Fig 2.		I_F	1	A
Peak Forward Surge Current, 8.3ms single half sine-wave superimposed on rated load		I_{FSM}	30	A
Maximum Instantaneous Forward Voltage @ 1A		V_F	1.7	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	T_A=25℃	I_R	5	μA
	T_A =100℃		100	
Typical Junction Capacitance [1]		C_J	15	pF
Maximum Reverse Recovery Time[2]		Trr	75	ns
Storage and Operating Temperature Range		T_{STG}, T_J	-55 ~ 150	℃

NOTES:

1. Measured at 1.0MHz and applied reverse voltage of 4.0V D.C.
2. Measured with IF=0.5A, IR=1A, IRR=0.25A

CHARACTERISTIC CURVES

FIG.1- REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



NOTES: 1. Rise Time=7ns max. Input Impedance=
1 megohm 22pf
2. Rise Time=10ns max. Sourse Impedance=
50 ohms

FIG.2- MAXIMUM AVERAGE FORWARD CURRENT DERATIN(

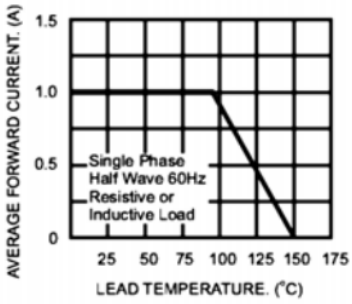


FIG.3- TYPICAL REVERSE CHARACTERISTICS

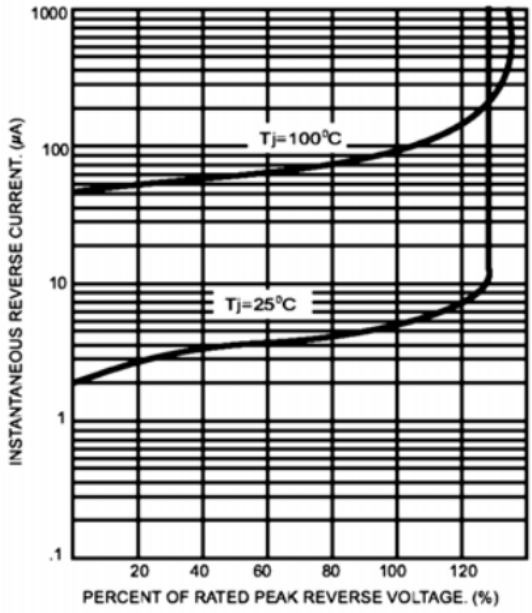


FIG.4- TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

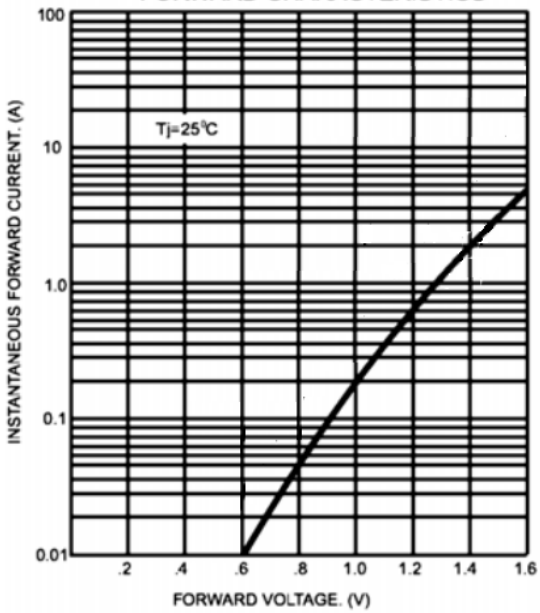


FIG.5- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

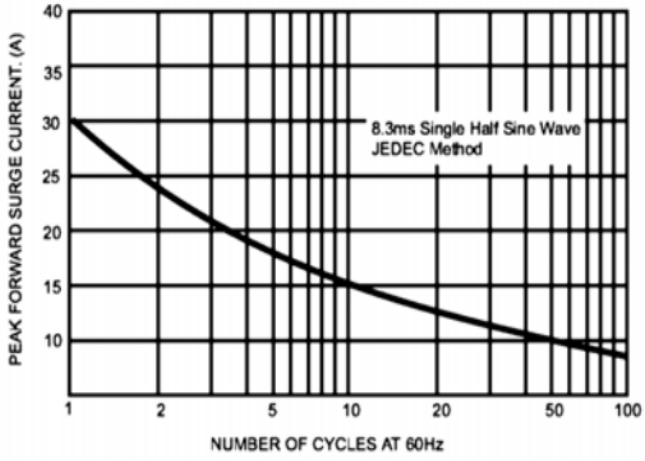


FIG.6- TYPICAL JUNCTION CAPACITANCE

