

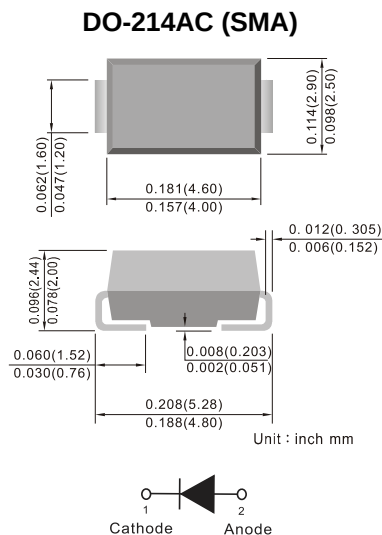
Surface Mount Rectifier Diode

Features

- Low profile package
- Ideal for automated placement
- Glass passivated chip junction
- High forward surge capability
- AEC-Q101 qualified
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C

Mechanical Data

- Package: SMA/DO-214AC
- Terminals: Tin plated leads, solderable per
- Polarity: Cathode line denotes the cathode end



Maximum Ratings & Characteristics ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Symbol	S3AAQ	S3BAQ	S3DAQ	S3GAQ	S3JAQ	S3KAQ	S3MAQ	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RMS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current	I _{F(AV)}	3.0							A
Non-repetitive peak forward surge current 8.3 ms singlehalf sine-wave	I _{FSM}	80							A
@I _F =3.0A Maximum forward voltage	V _F	1.1							V
@V _{DC} Maximum reverse current	I _R	5							μA
TA= 25°C TA= 125°C		100							
Typical thermal resistance (Note 1)	R _{θJA}	85							°C/W
V _R =4.0V,f=1MHz Type junction capacitance	C _J	40							pF
Operating junction and storage temperature rang	T _J , T _{STG}	-55 --- +150							°C

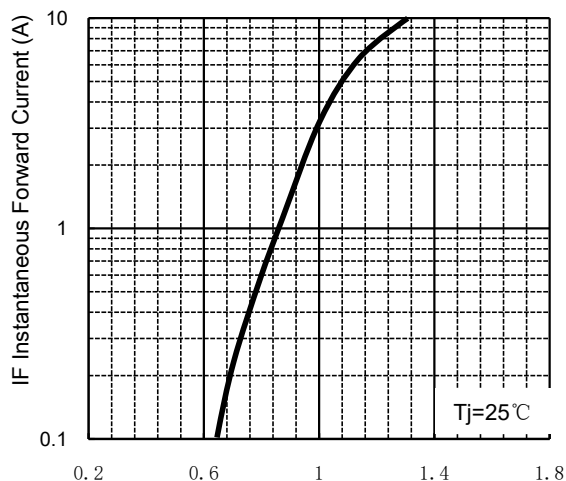
Note:

1) Thermal resistance from junction to ambient, PCB mounted.



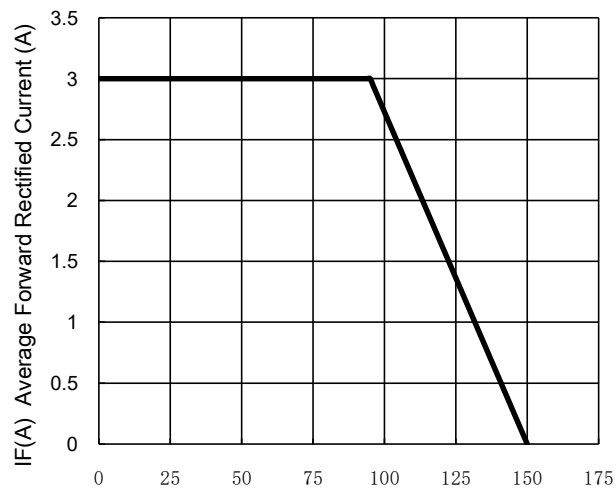
Characteristic Curves

TYPICAL FORWARD CHARACTERISTIC



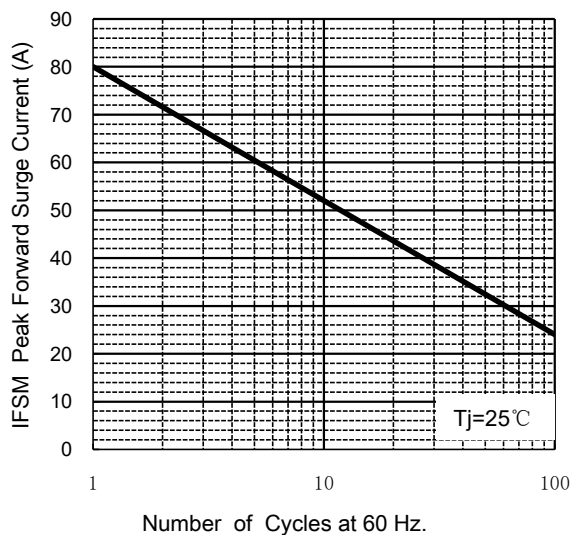
VF Instantaneous Forward Voltage (V)

FORWARD CURRENT DERATING CURVE



T_{amb} , ambient temperature ($^\circ\text{C}$)

MAXIMUM NON REPETITIVE PEAK
FORWARD SURGE CURRENT



Number of Cycles at 60 Hz.

Typical Reverse Characteristics

