

## S1A THRU S1Z

### Surface Mount General-purpose Rectifiers

Reverse Voltage 50 ~ 2000 V

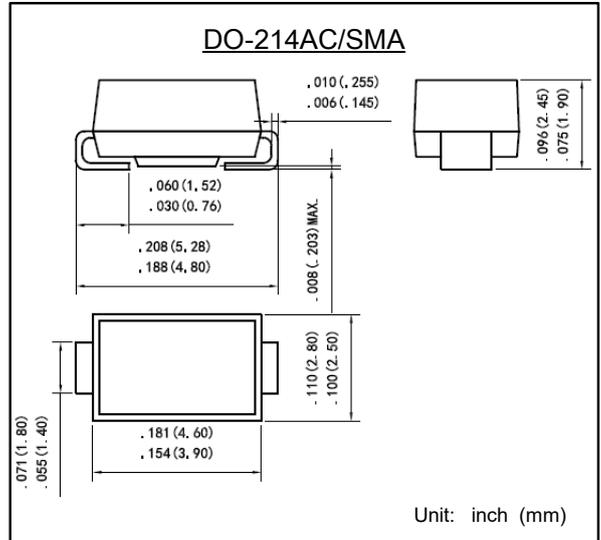
Forward Current 1.0 A

#### Features

- Low reverse leakage
- High forward surge capability
- High reliability
- High temperature soldering guaranteed: 260°C/10seconds
- Lead and body according with RoHS standard
- Green compound with suffix "-F" on Marking

#### Mechanical Data

- Case:DO-214AC Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Pure tin plated, lead free



### Maximum Ratings & Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

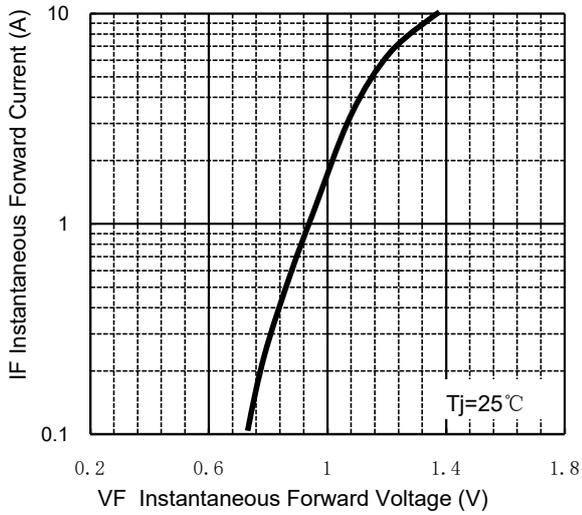
Parameter	Symbols	S1A	S1B	S1D	S1G	S1J	S1K	S1M	S1P	S1T	S1Z	Unit
Marking	/	S1A	S1B	S1D	S1G	S1J	S1K	S1M	S1P	S1T	S1Z	/
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	1300	1600	2000	V
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	910	1120	1400	V
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	1300	1600	2000	V
Maximum average forward rectified current	$I_{F(AV)}$	1.0										A
Non-repetitive peak forward surge current 8.3 ms singlehalf sine-wave	$I_{FSM}$	30										A
Maximum forward voltage @ $I_F=1.0A$	$V_F$	1.1										V
Maximum reverse current @VDC	TA= 25°C	5										μA
	TA= 125°C S1Z (TA= 100°C)	100										
Typical thermal resistance (Note 1)	$R_{\theta JA}$	85									105	°C/W
Type junction capacitance VR=4.0V,f=1MHz	$C_J$	12										pF
Operating junction and storage temperature rang	$T_J, T_{STG}$	-55 --- +150										°C

Note:

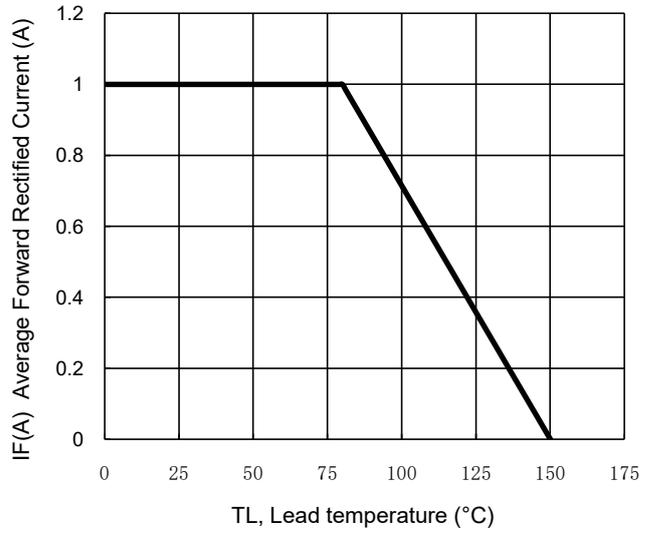
1) Thermal resistance from junction to ambient, PCB mounted.

# S1A THRU S1T Characteristic Curves

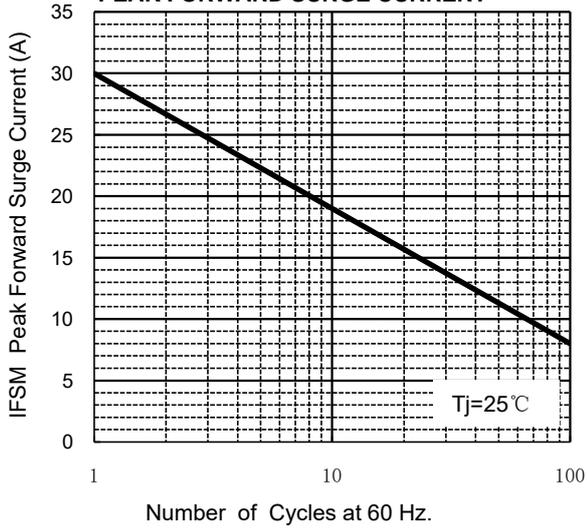
**TYPICAL FORWARD CHARACTERISTIC**



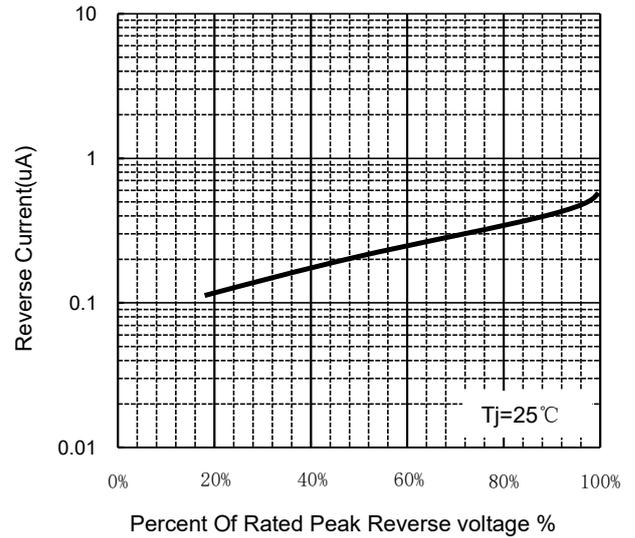
**FORWARD CURRENT DERATING CURVE**



**MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT**

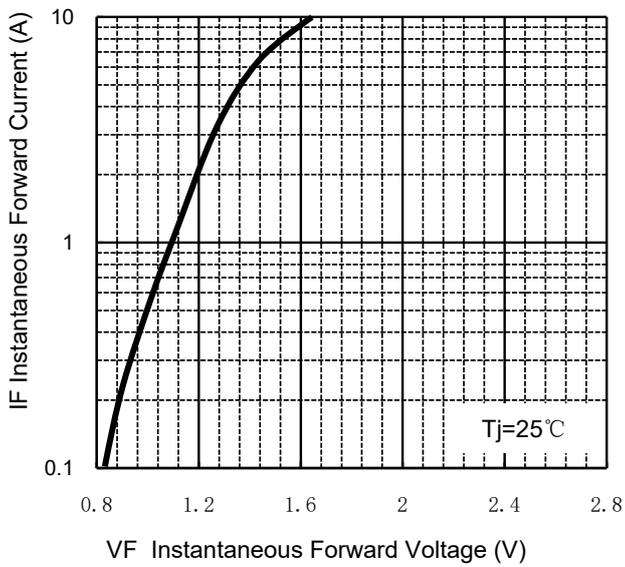


**Typical Reverse Characteristics**

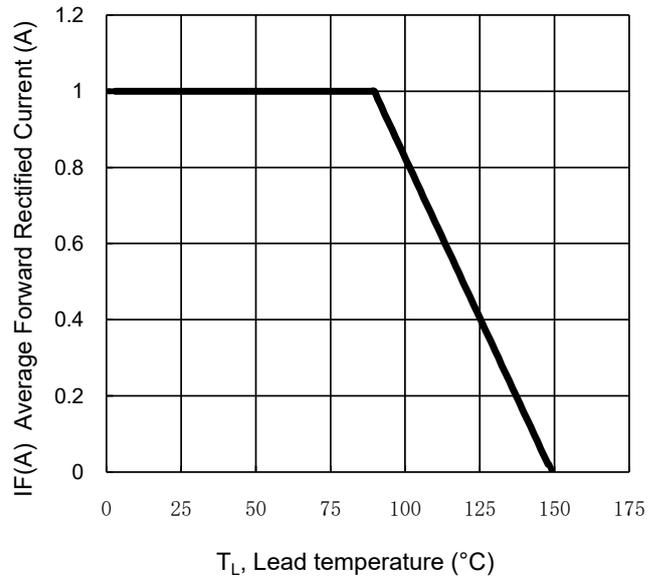


# S1Z Characteristic Curves

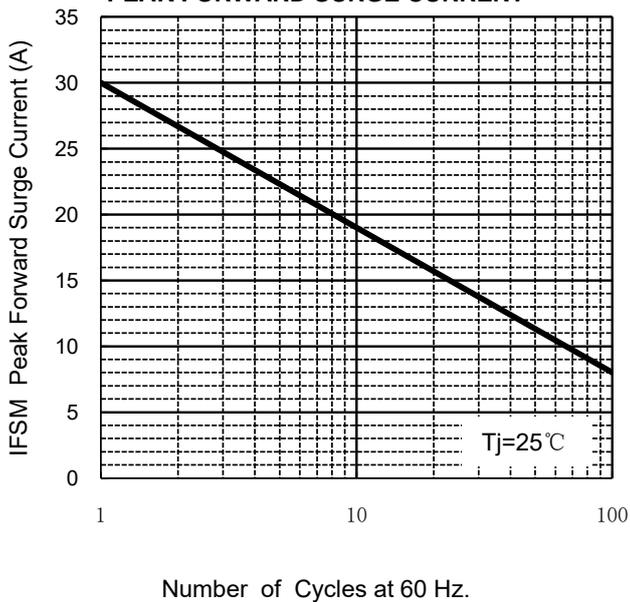
**TYPICAL FORWARD CHARACTERISTIC**



**FORWARD CURRENT DERATING CURVE**



**MAXIMUM NON REPETITIVE  
PEAK FORWARD SURGE CURRENT**



**Typical Reverse Characteristics**

