

## FEATURES

- For surface mount applications
- Low profile package
- Easy pick and place
- Ultrafast recovery times for high efficiency
- Low forward voltage, low power loss
- Built-in strain relief, ideal for automated placement
- High temperature soldering: 250°C/10 seconds on terminals
- Plastic package has underwriters laboratories flammability classification 94V-0



## MECHANICAL DATA

- Case: JEDEC DO-214AC, molded plastic body over passivated chip
- Terminals: Solder Plated, solderable per MIL-STD-750, Method 2026

## Maximum Ratings (@T<sub>A</sub> = 25°C unless otherwise specified)

Characteristic	Symbol	MURA120T3G	UNITS
Marking code		MURA120T3G	
Maximum recurrent peak reverse voltage	V <sub>RRM</sub>	200	V
Maximum RMS voltage	V <sub>RWS</sub>	140	V
Maximum DC blocking voltage	V <sub>DC</sub>		V
Maximum average forward rectified current at T <sub>L</sub> =90°C	I <sub>F(AV)</sub>	2.0	A
Peak forward surge current 8.3ms single half sine-wave super imposed on rated load(JEDEC Method)	I <sub>FSM</sub>	50	A

## Thermal Characteristics

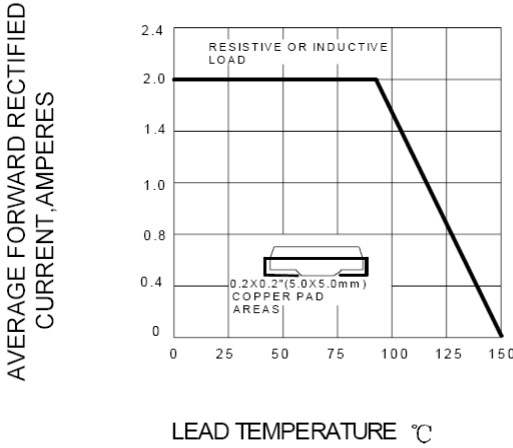
Characteristic	Symbol	MURA120T3G	UNITS
Typical junction capacitance at 4.0V,1MHZ	C <sub>J</sub>	50	pF
Maximum thermal resistance (NOTE1)	R <sub>θJA</sub> R <sub>θJL</sub>	40 15	°C/W
Operating temperature range	T <sub>J</sub>	-55----- +150	°C
Storage temperature range	T <sub>STG</sub>	-55----- +150	°C

## Electrical Characteristics (@T<sub>A</sub> = 25°C unless otherwise specified)

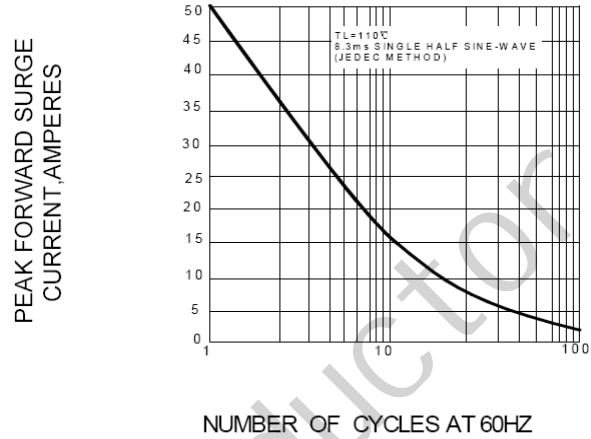
Characteristic	Symbol	MURA120T3G	UNITS
Maximum instantaneous forward voltage at 2.0A	V <sub>F</sub>	1.0	V
Maximum DC reverse current @T <sub>A</sub> =25°C at rated DC blocking voltage @T <sub>A</sub> =125°C	I <sub>R</sub>	10.0 350	μA
Maximum reverse recovery time at I <sub>F</sub> =0.5A I <sub>R</sub> =1.0A I <sub>tr</sub> =0.25A	t <sub>rr</sub>	50	ns

NOTE: 1.P.C.B.mounted on 0.2X0.2"(5.0X5.0mm) copper pad area

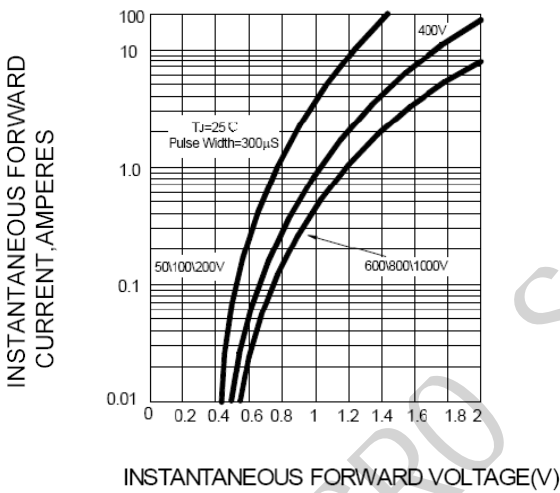
**FIG.1 – FORWARD CURRENT DERATING CURVE**



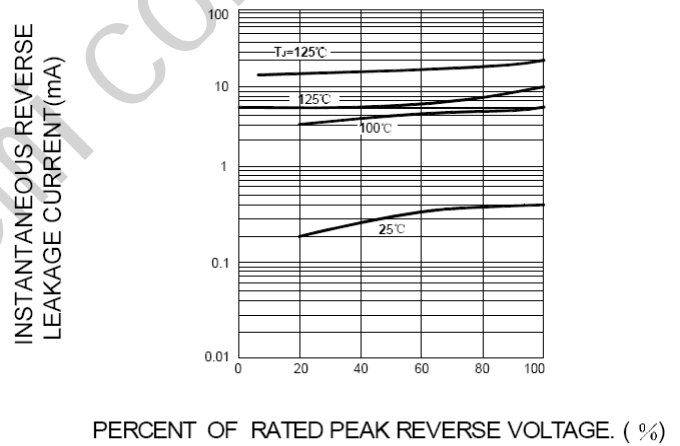
**FIG.2 – MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



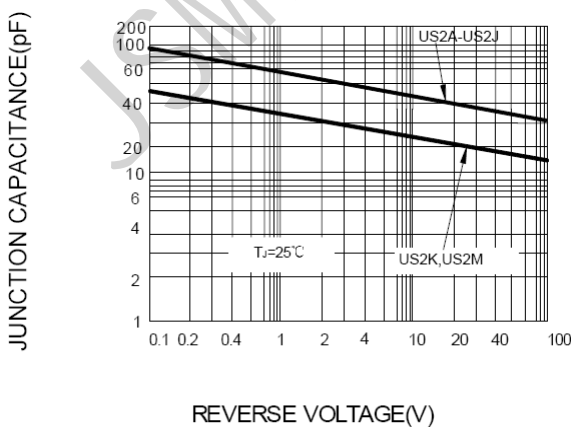
**FIG.3 – TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**



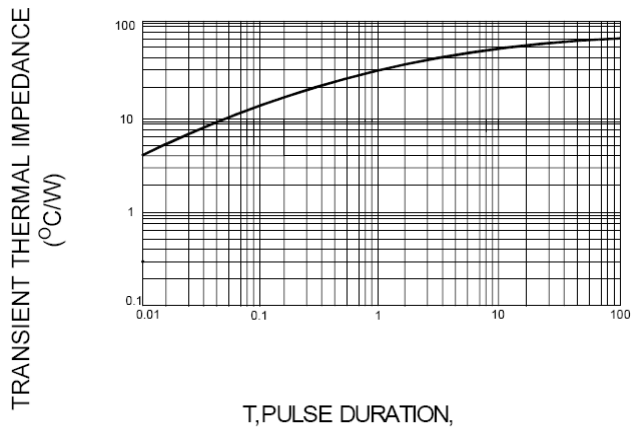
**FIG.4 – TYPICAL REVERSE CHARACTERISTICS**



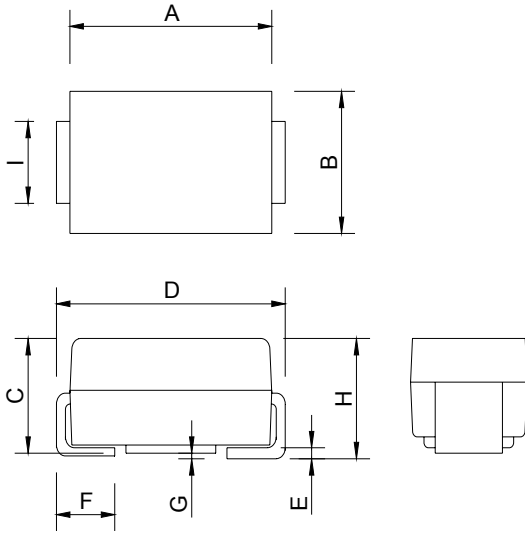
**FIG.5 – TYPICAL JUNCTION CAPACITANCE**



**FIG.6 – TYPICAL TRANSIENT THERMAL IMPEDANCE**

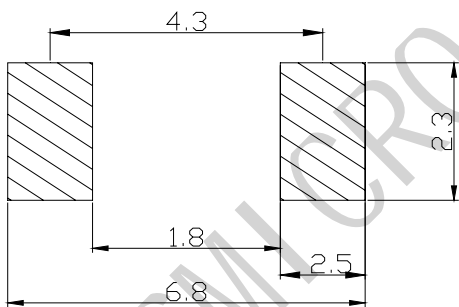


### PACKAGE OUTLINE DIMENSIONS



DO-214AC(SMA)		
Dim	Min	Max
A	4.30	4.70
B	3.30	3.70
C	2.00	2.30
D	5.05	5.55
E	0.10	0.30
F	0.95	1.55
G	0.20MAX	
H	2.10	2.50
I	1.85	2.15
All Dimensions in mm		

### SOLDERING FOOTPRINT



Unit : mm