

### 3A, 60V Trench Schottky Rectifier

**FEATURES**

- Patented Trench Schottky technology
- Low power loss, high efficiency
- Ideal for automated placement
- High surge current capability
- Compliant to RoHS Directive 2011/65/EU and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21 definition



**DO-214AC (SMA)**

**MECHANICAL DATA**

**Case:** DO-214AC (SMA)

Molding compound, UL flammability classification rating 94V-0

- Moisture sensitivity level: level 1, per J-STD-020

Packing code with suffix "G" means green compound (halogen-free)

**Terminal:** Matte tin plated leads, solderable per JESD22-B102

Meet JESD 201 class 2 whisker test

**Polarity:** Indicated by cathode band

**Weight:** 0.06g (approximately)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T <sub>A</sub> =25°C unless otherwise noted)						
PARAMETER		SYMBOL	TSSA3U60		UNIT	
Marking code			A3U60			
Maximum repetitive peak reverse voltage		V <sub>RRM</sub>	60		V	
Maximum average forward rectified current		I <sub>F(AV)</sub>	3		A	
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load		I <sub>FSM</sub>	60		A	
			TYP.	MAX.		
Maximum instantaneous forward voltage (Note 1)	I <sub>F</sub> = 3A	T <sub>J</sub> = 25°C	V <sub>F</sub>	0.48	0.54	V
		T <sub>J</sub> = 125°C	V <sub>F</sub>	0.41	0.50	
Maximum instantaneous reverse current at rated reverse voltage		T <sub>J</sub> = 25°C	I <sub>R</sub>	-	500	μA
		T <sub>J</sub> = 125°C		12	30	mA
Typical thermal resistance		R <sub>θJL</sub>	27		°C/W	
		R <sub>θJA</sub>	70			
Operating temperature range		T <sub>J</sub>	- 55 to +150		°C	
Storage temperature range		T <sub>STG</sub>	- 55 to +150		°C	

Note 1: Pulse Test with Pulse Width=300μs, 1% Duty Cycle

**ORDERING INFORMATION**

PART NO.	PACKING CODE	PACKING CODE SUFFIX	PACKAGE	PACKING
TSSA3U60	E3	G	Clip SMA	1,800 / 7" Plastic reel
	E2		Clip SMA	7,500 / 13" Plastic reel

**EXAMPLE**

PREFERRED PART NO.	PART NO.	PACKING CODE	PACKING CODE SUFFIX	DESCRIPTION
TSSA3U60 E3G	TSSA3U60	E3	G	Green compound

**RATINGS AND CHATACTERISTICS CURVES**

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

FIG.1 FORWARD CURRENT DERATING CURVE

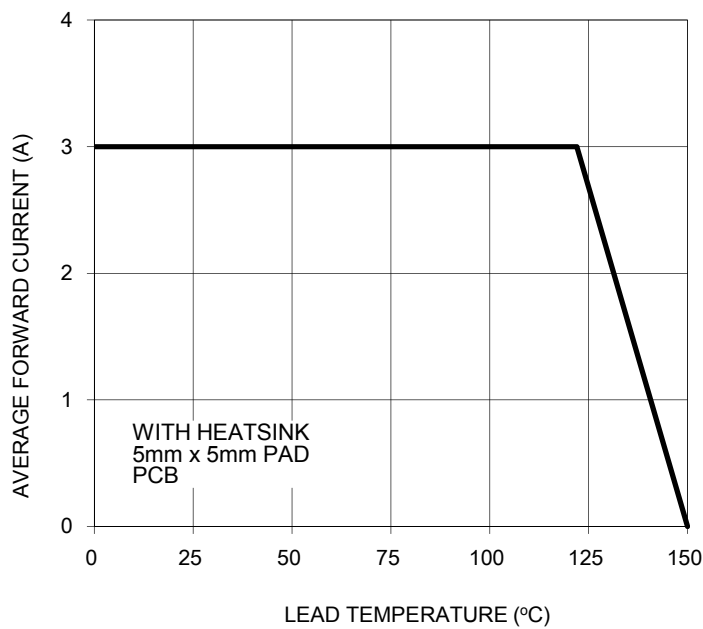


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

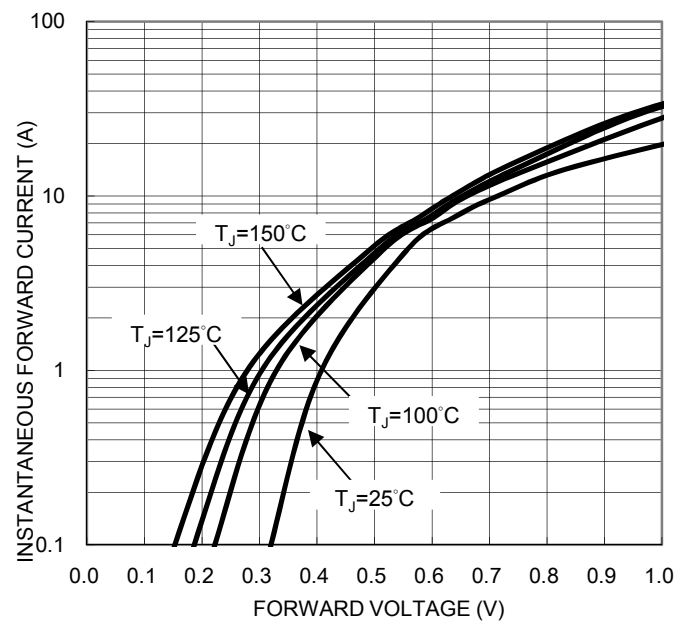


FIG. 3 TYPICAL REVERSE CHARACTERISTICS

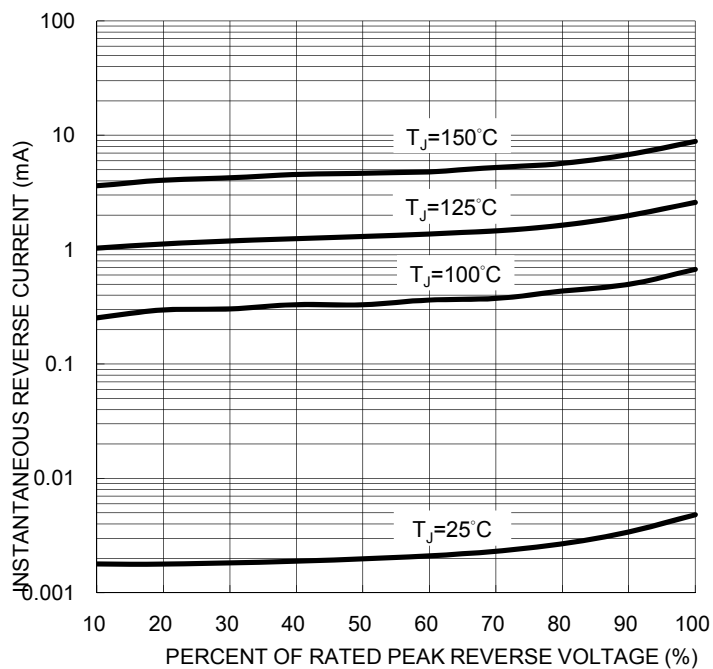


FIG.4 TYPICAL JUNCTION CAPACITANCE

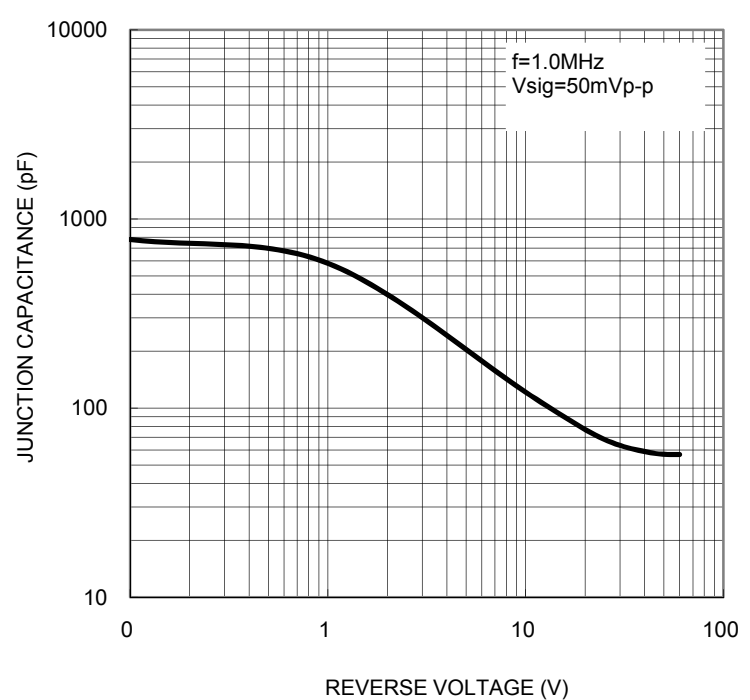
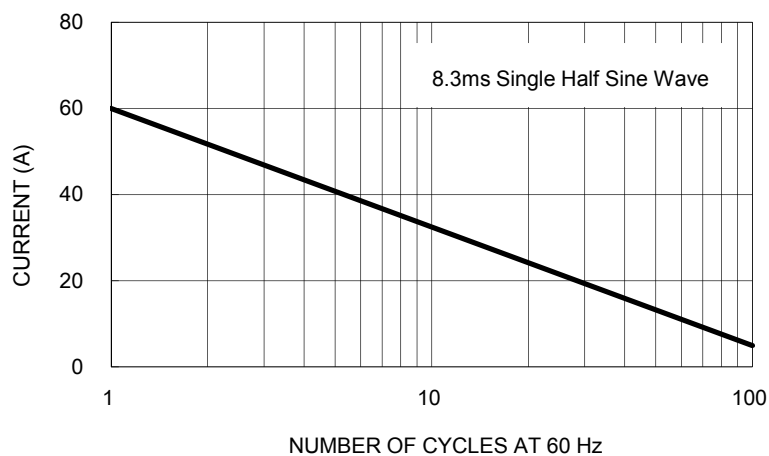
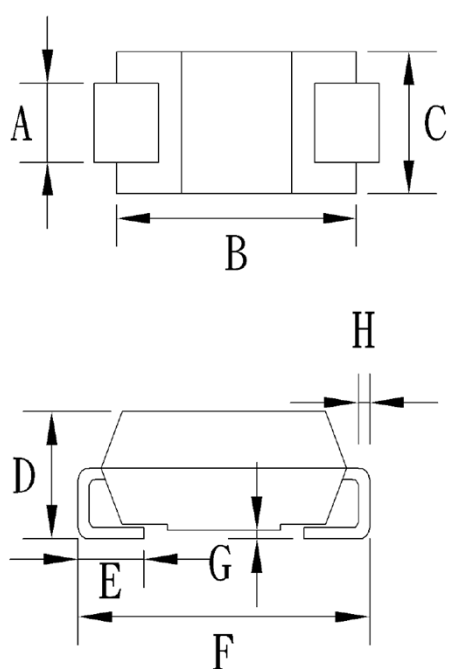


FIG. 5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

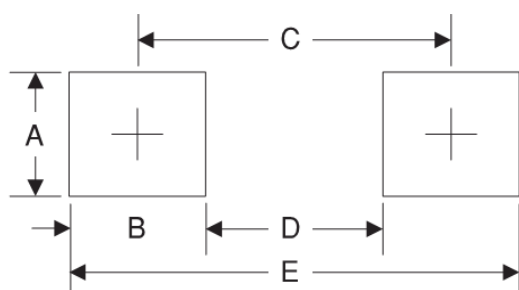


PACKAGE OUTLINE DIMENSIONS  
**DO-214AC (SMA)**



Dim.	Unit(mm)		Unit(inch)	
	Min	Max	Min	Max
A	1.27	1.58	0.05	0.062
B	4.06	4.6	0.16	0.181
C	2.29	2.84	0.09	0.111
D	1.99	2.5	0.078	0.098
E	0.9	1.41	0.035	0.056
F	4.95	5.33	0.195	0.21
G	0.1	0.2	0.004	0.008
H	0.15	0.31	0.006	0.012

SUGGESTED PAD LAYOUT



Symbol	Unit (mm)	Unit (inch)
A	1.68	0.066
B	1.52	0.060
C	3.93	0.155
D	2.41	0.095
E	5.45	0.215

MARKING DIAGRAM



- P/N = Marking Code
- G = Green Compound
- YW = Date Code
- F = Factory Code

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