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)

Pb-Free

RoHS COMPLIANT

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_A=25°C unless otherwise noted)						
PARAMETER			SYMBOL	TSSA3U60		UNIT
Marking code				A3U60		
Maximum repetitive peak reverse voltage			V_{RRM}	60		V
Maximum average forward rectified current			$I_{F(AV)}$	3		A
Peak forward surge current, 8.3 ms single half sine-wave superimposed on rated load			I_{FSM}	60		A
				TYP.	MAX.	
Maximum instantaneous forward voltage (Note 1)	I_F = 3A	T_J = 25°C	V_F	0.48	0.54	V
		T_J = 125°C	V_F	0.41	0.50	
Maximum instantaneous reverse current at rated reverse voltage		T_J = 25°C	I_R	-	500	μA
		T_J = 125°C		12	30	mA
Typical thermal resistance			$R_{\theta JL}$	27		°C/W
			$R_{\theta JA}$	70		
Operating temperature range			T_J	- 55 to +150		°C
Storage temperature range			T_{STG}	- 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°C unless otherwise noted)

FIG.1 FORWARD CURRENT DERATING CURVE

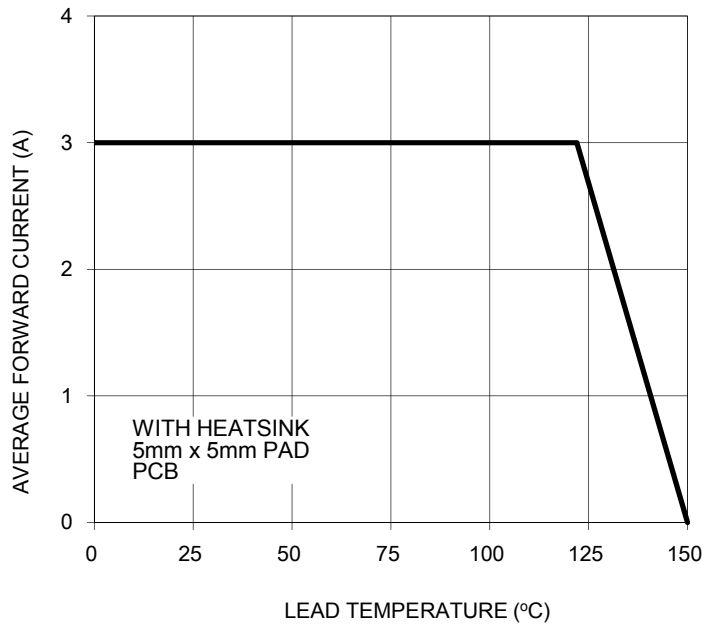


FIG. 2 TYPICAL FORWARD CHARACTERISTICS

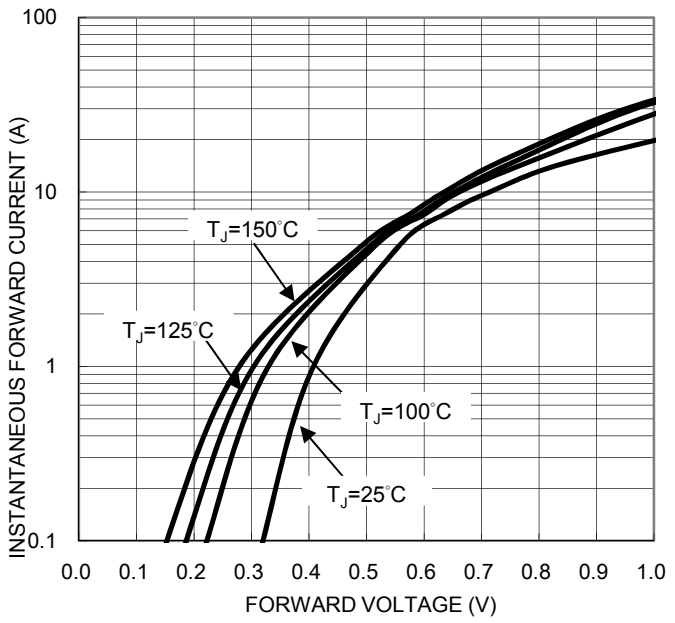


FIG. 3 TYPICAL REVERSE CHARACTERISTICS

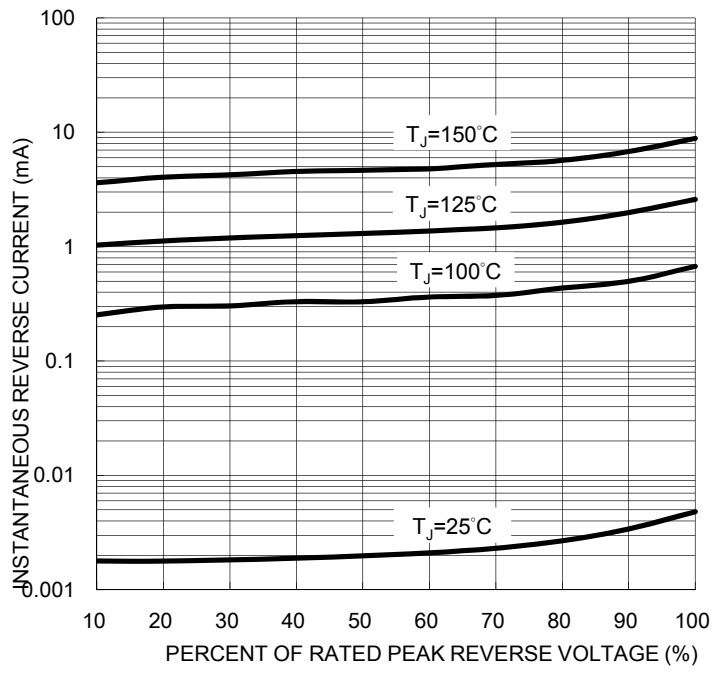


FIG.4 TYPICAL JUNCTION CAPACITANCE

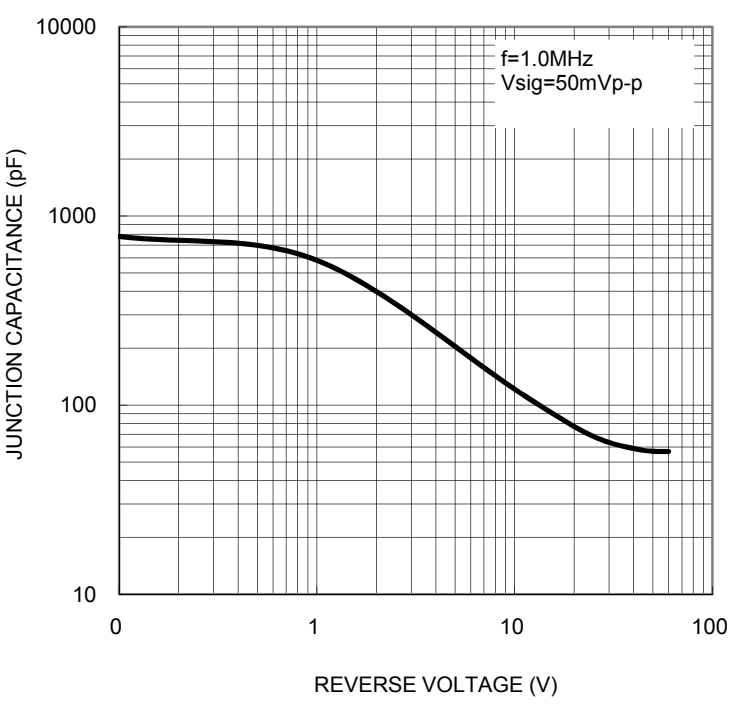
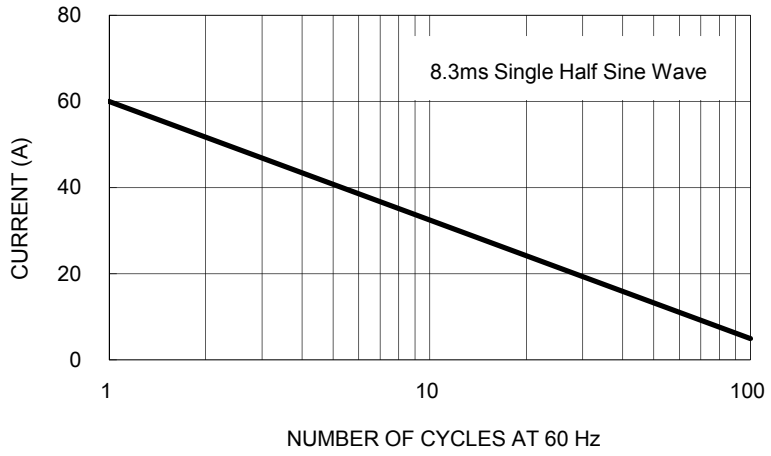
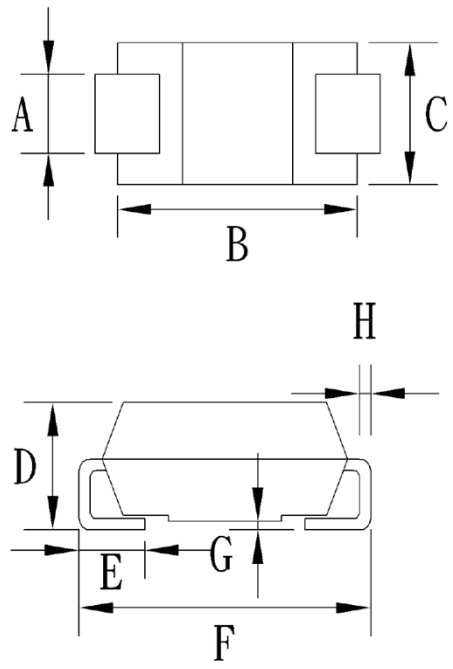


FIG. 5 MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT



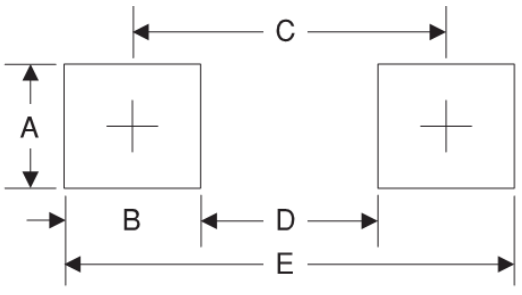
PACKAGE OUTLINE DIMENSIONS

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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