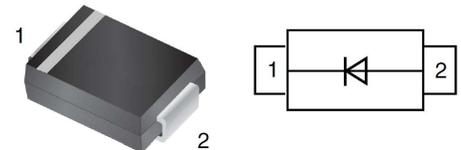


Ultra-Fast Rectifier in DO-214AC/SMA

Features

- Ultra-Fast Recovery Time for High Efficiency
- Glass passivated junction chip
- Built-in strain relief, ideal for automated placement
- High Current Capability



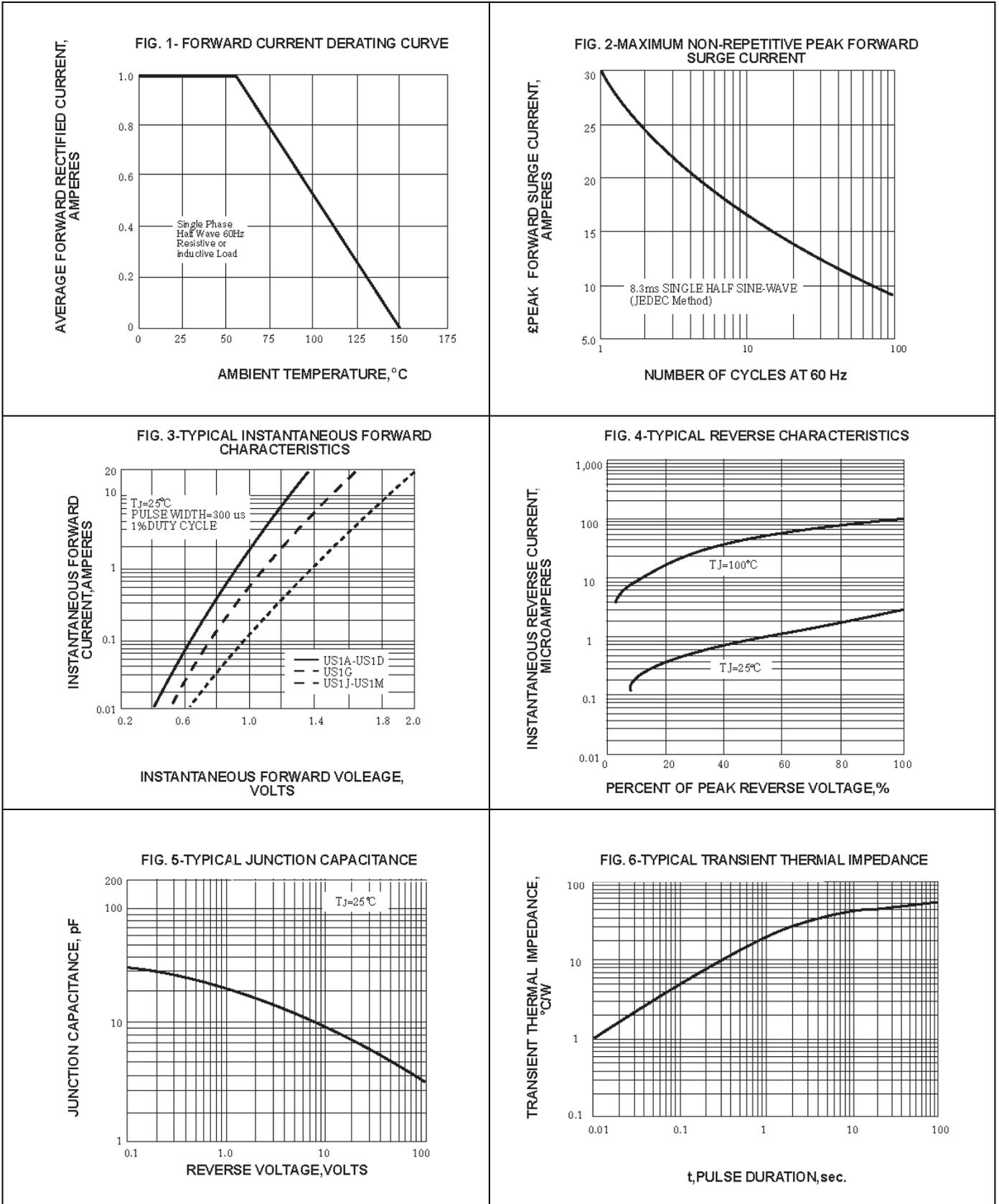
Mechanical Data

- **Case:** JEDEC DO-214AC(SMA)molded plastic
Lead free; RoHS compliant
- **Molding Compound Flammability Rating:**
UL 94 V-0
- **Terminals:** High temperature soldering guaranteed:
260 °C/10 sec. at terminals

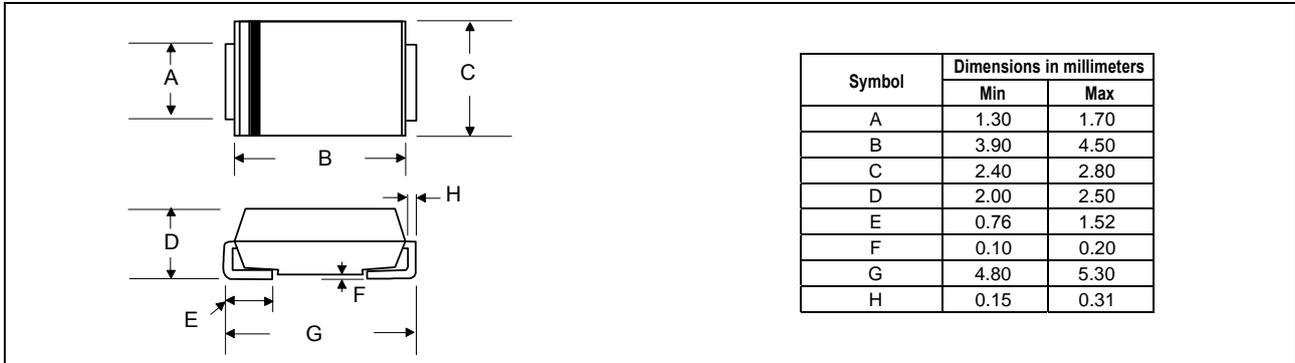
Maximum Ratings And Electrical Characteristics									
Ratings at 25 °C ambient temperature unless otherwise specified. Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.									
Parameter	Symbols	US 1A	US 1B	US 1D	US 1G	US 1J	US 1K	US 1M	Units
Maximum 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 (See Fig.1)	$I_{(AV)}$	1.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30.0							A
Maximum instantaneous forward voltage @ 2.0A DC	V_F	1.0		1.4		1.7		V	
Maximum DC reverse current @ $T_J = 25^\circ C$ at rated DC blocking voltage @ $T_J = 125^\circ C$	I_R	5.0				100			μA
Maximum reverse recovery time (Note1)	t_{rr}	50				75			ns
Typical junction capacitance (Note 2)	C_J	17							pF
Typical thermal resistance (Note 3)	$R_{\theta JA}$ $R_{\theta JL}$	50				35			$^\circ C/W$
Operating junction temperature range	T_J	-55 to +150							$^\circ C$
Storage temperature range	T_{STG}	-55 to +150							$^\circ C$

Notes: 1. Reverse Recovery Test Conditions: $I_F = 0.5A$, $I_R = 1.0A$, $I_{RR} = 0.25A$
 2. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.
 3. Units Mounted on P.C.B. 5.0×5.0mm(0.013mm thick) Pad Areas

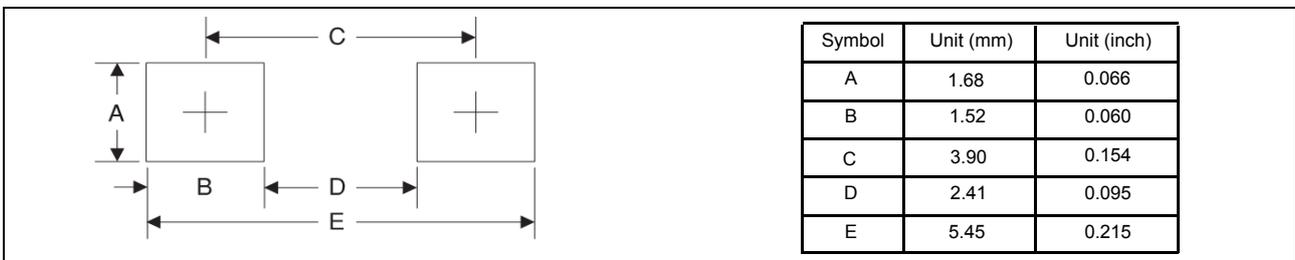
Typical Characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)



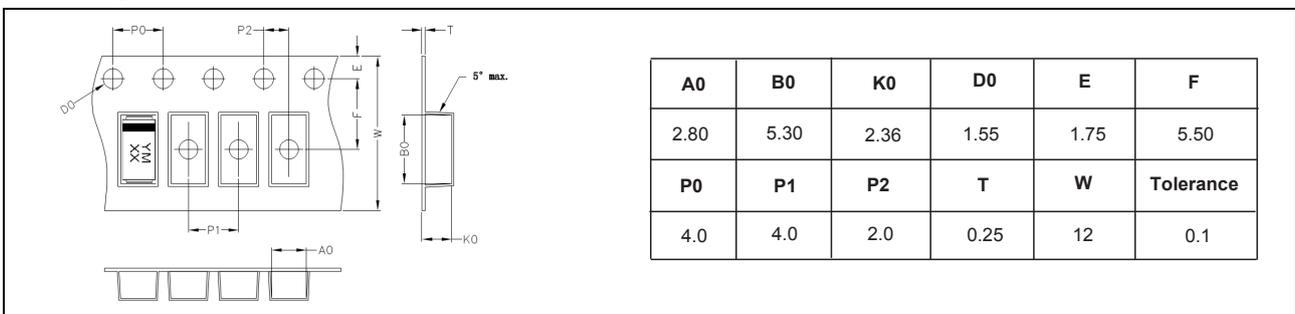
Package Dimensions



PAD Dimensions



Packing Information



Ordering information

Order code	Package	Packaging option	Base quantity	Packaging specification
US1A thur US1M	DO-214AC/SMA	Tape and reel	5000pcs / reel	EIA STD RS-481

Revision history

Date	Revision	Changes
23-May-2012	1.0	Initial release
10-May-2018	2.0	Update

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