

Surface Mount Rectifiers

US2AA--US2MA

FEATURES

- Plastic package has underwriters laboratories flammability classification 94V-0
- 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



Lead-free



MECHANICAL DATA

- Case: JEDEC DO-214AC, molded plastic body over passivated chip
- Terminals: Solder Plated, solderable per MIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.002 ounces, 0.064 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

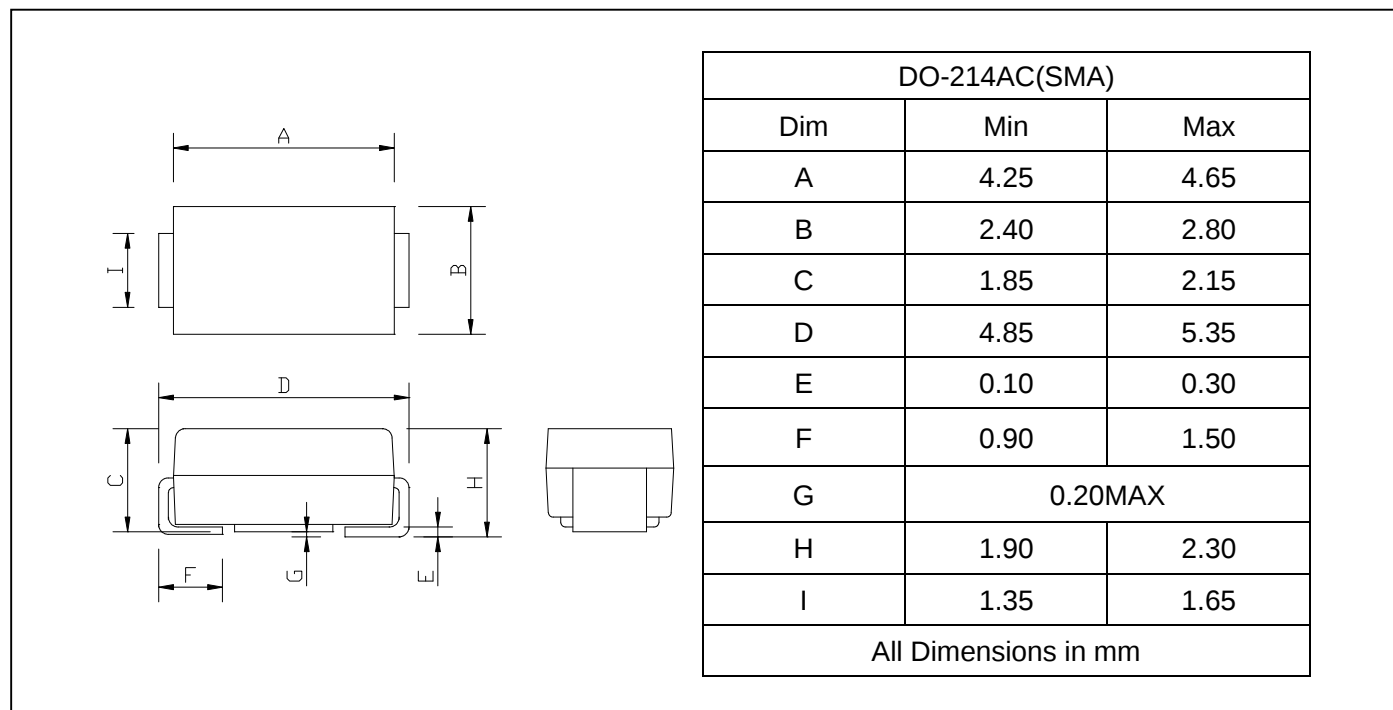
		US2AA	US2BA	US2DA	US2GA	US2JA	US2KA	US2MA	UNITS
Maximum recurrent peak reverse voltage	V _{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS voltage	V _{RWS}	35	70	140	280	420	560	700	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	800	1000	V
Maximum average forward rectified current at T _L =90℃	I _{F(AV)}	2.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	50							A
Maximum instantaneous forward voltage at 2.0A	V _F	1.0				1.7			V
Maximum DC reverse current @T _A =25℃ at rated DC blocking voltage @T _A =125℃	I _R	10.0 350							μ A
Maximum reverse recovery time at I _F =0.5A I _R =1.0A I _{rr} =0.25A	t _{rr}	50				75			ns
Typical junction capacitance at4.0V,1MHZ	C _J	50				30			p F
Maximum thermal resistance (NOTE1)	R _{θJA}	50							℃/W
	R _{θJL}	18							
Operating temperature range	T _J	-55----- +150							℃
Storage temperature range	T _{STG}	-55----- +150							℃

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

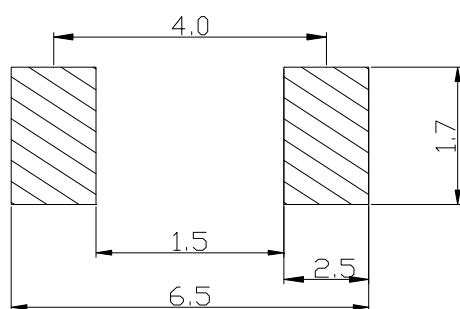
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PACKAGE OUTLINE DIMENSIONS



SOLDERING FOOTPRINT



Unit : mm

PACKAGE INFORMATION

Device	Package	Shipping
US2AA--US2MA	DO-214AC(SMA)	5000/Tape&Reel

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FIG.1 -- FORWARD DERATING CURVE

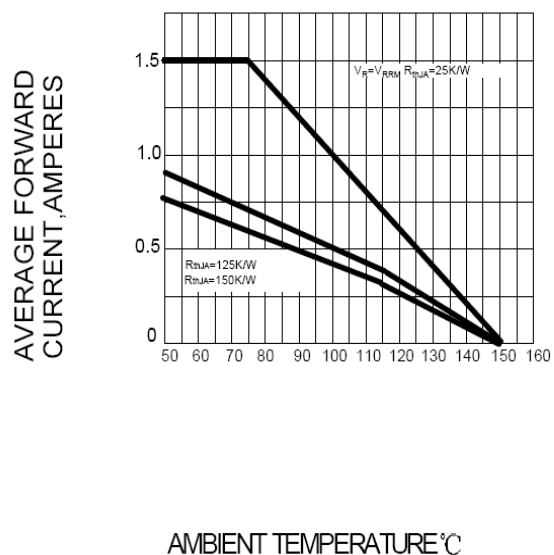


FIG.2--PEAK FORWARD SURGE CURRENT

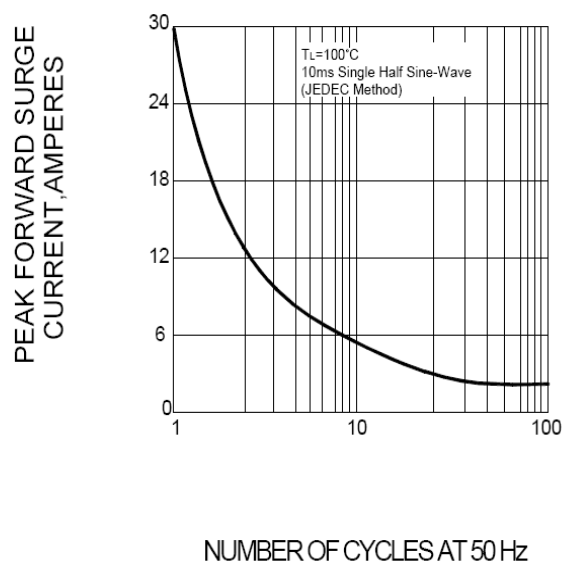


FIG.3 --TYPICAL FORWARD CHARACTERISTIC

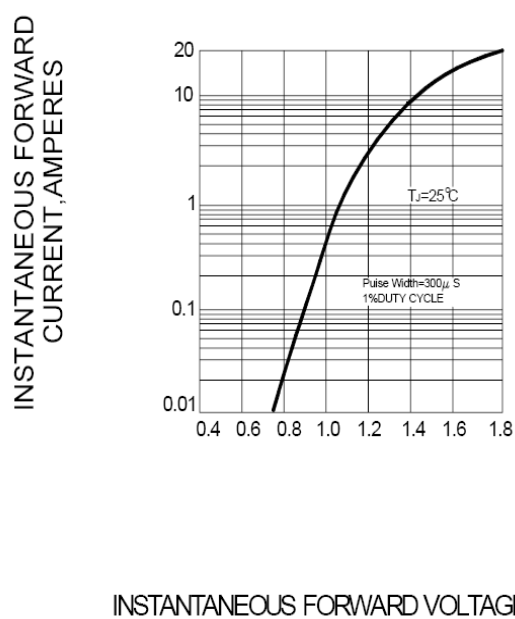


FIG.4 -- TYPICAL REVERSE CHARACTERISTICS

