

FEATURES

- Plastic package has underwriters laboratories flammability classification 94V-0
- For surface mount applications
- Glass passivated chip junctions
- 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

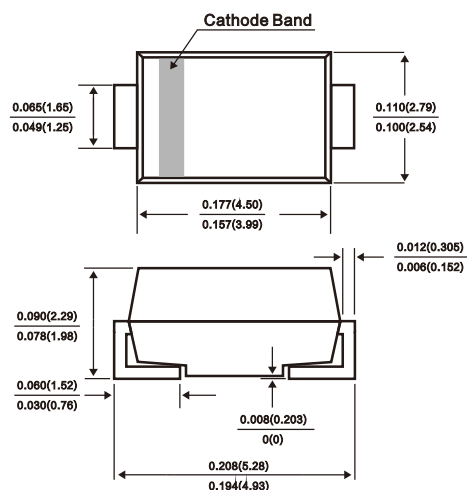
Mechanical Data

Case: JEDEC DO-214AC, molded plastic body over passivated chip

Polarity: Color band denotes cathode end

Weight: 0.002 ounces, 0.064 gram

SMA(DO-214AC)



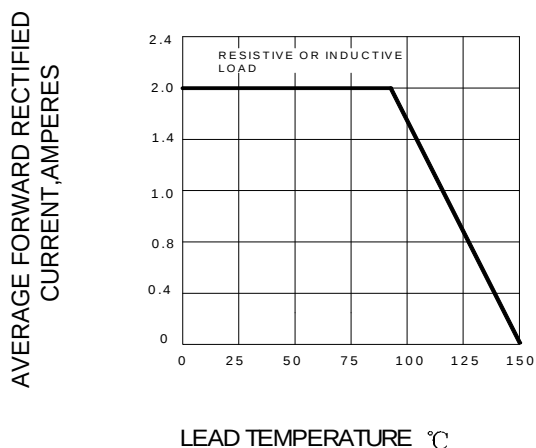
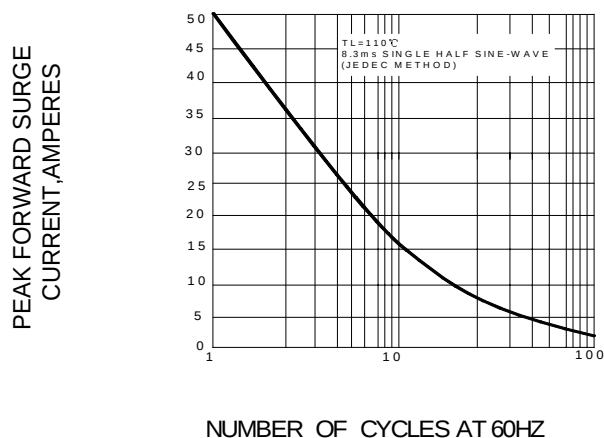
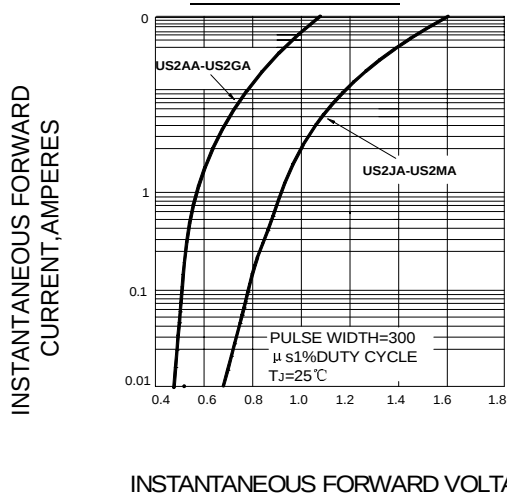
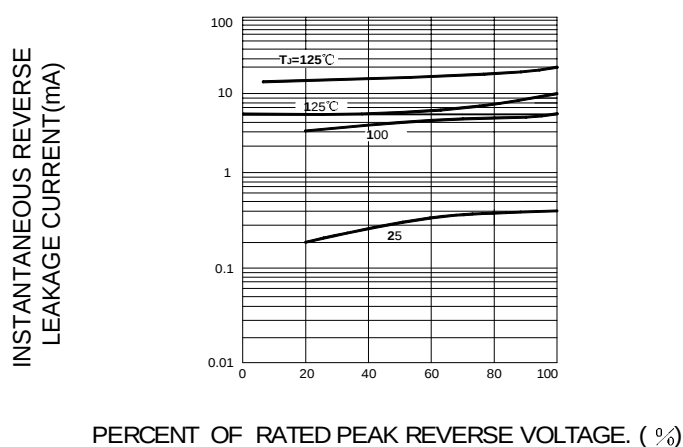
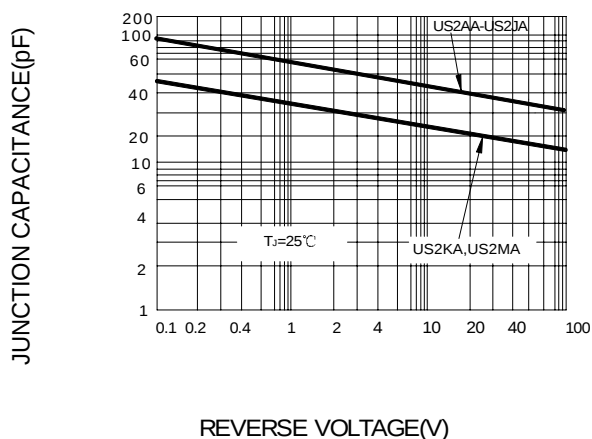
Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

Device marking code		US2A	US2B	US2D	US2G	US2J	US2K	US2M	UNITS
Maximum repetitive 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 forw ard rectified current @T _L =90°C	I _{F(AV)}	2.0							A
Peak forw ard surge current 8.3ms single half-sine-w ave superimposed on rated load(JEDEC Method)	I _{FSM}	50							A
Maximum instantaneous forw ard voltage at 2A	V _F	1.0				1.7			V
Maximum DC reverse current @T _A =25°C at rated DC blockjing voltage @T _A =100°C	I _R	10 350							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 at 4.0V,1MH _z	C _J	50				30			pF
Maximum thermal resistance (NOTE1)	R _{θJA}	50							°C/W
	R _{θJL}	18							
Operating temperature range	T _J	-55 to +150							°C
Storage temperature range	T _{STG}	-55 to +150							°C

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
