

SURFACE MOUNT ULTRAFAST EFFICIENT RECTIFIER

ES2A-2J

Reverse Voltage - 50 to 600 Volts

Forward Current - 2.0 Ampere

FEATURES

Plastic package has Underwriters Laboratory

Flammability Classification 94V-0

Glass passivated chip junctions

Ultrafast recovery times for high efficiency

Low forward voltage, low power loss

High temperature soldering guaranteed:

260°C/10 seconds on terminals

MECHANICAL DATA

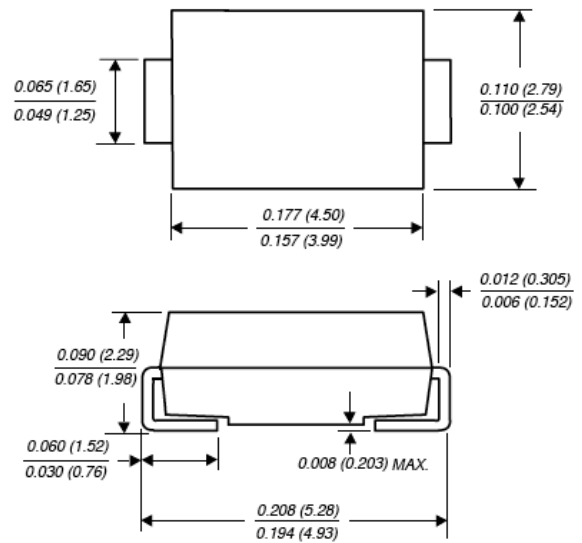
Case: JEDEC DO-214AC molded plastic body

Terminals: Solder plated, solderable per MIL-STD-750, Method 206

Polarity: Color band denotes cathode end

Weight: 0.002 ounces, 0.064 gram

SMB (DO214AC)



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified

		ES2A	ES2B	ES2D	ES2G	ES2J	UNITS
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	200	400	600	V
Maximum RMS voltage	V _{RWS}	35	70	140	280	420	V
Maximum DC blocking voltage	V _{DC}	50	100	200	400	600	V
Maximum average forward rectified current at T _L =110℃	I _{F(AV)}	2					A
Peak forward surge current 8.3ms single half-sine-wave	I _{FSM}	30					A
Maximum instantaneous forward voltage at I _{FM} =1.0A	V _F	0.95			1.3	1.7	V
Maximum DC reverse current TJ=25℃ At rated DC blocking voltage TA=100℃	I _R	10 200					uA
Maximum reverse recovery time	T _{rr}	30				50	nS
Typical junction capacitance	C _j	25				19	PF
Maximum thermal resistance	R _{θJA}	75					℃/W
	R _{θJL}	25					℃/W
Storage temperature range	T _{STG}	-55 to +150					℃

NOTE : 1.Pulse test: Pulse width 300us, duty cycle 1%

Ratings and Characteristic Curves

FIG. 1 FORWARD DERATING CURVE

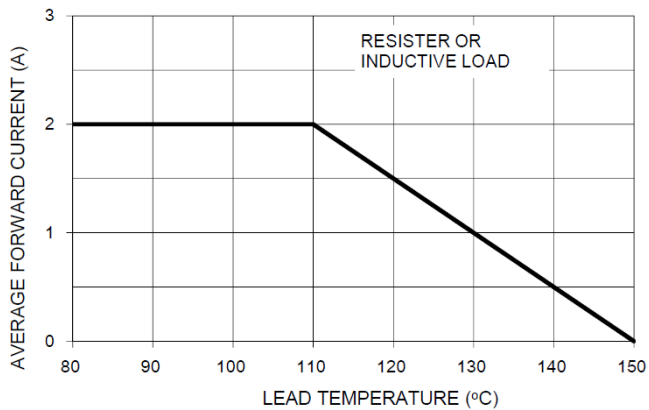


FIG. 2 MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

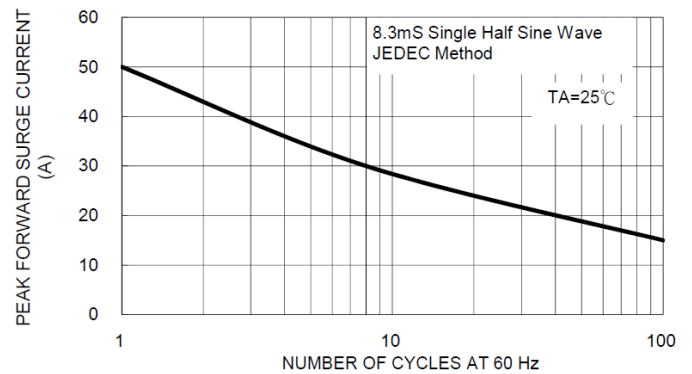


FIG. 3 TYPICAL FORWARD CHARACTERISTICS

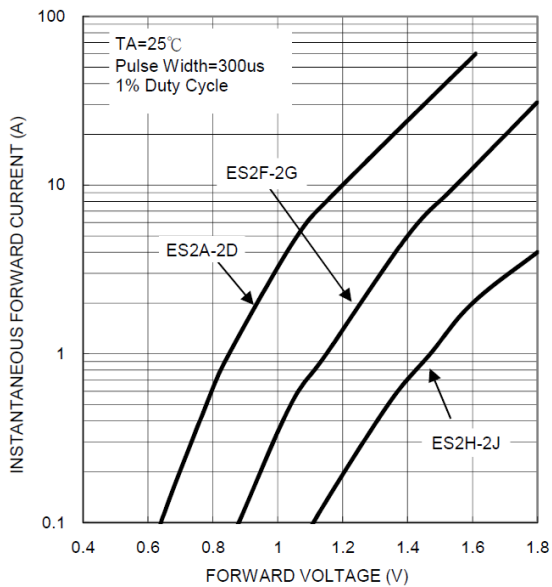


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

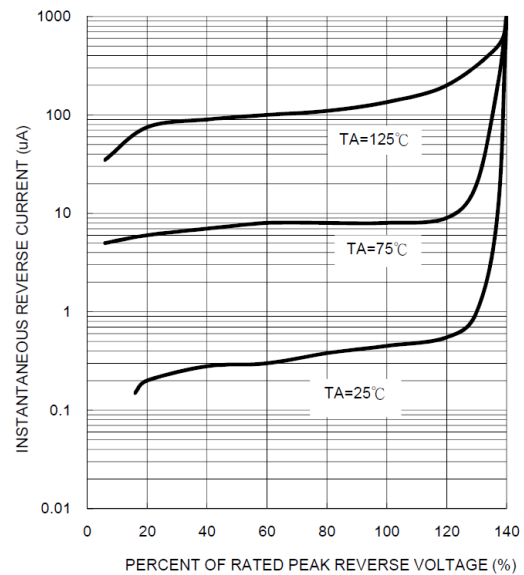


FIG. 5 TYPICAL JUNCTION CAPACITANCE

