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

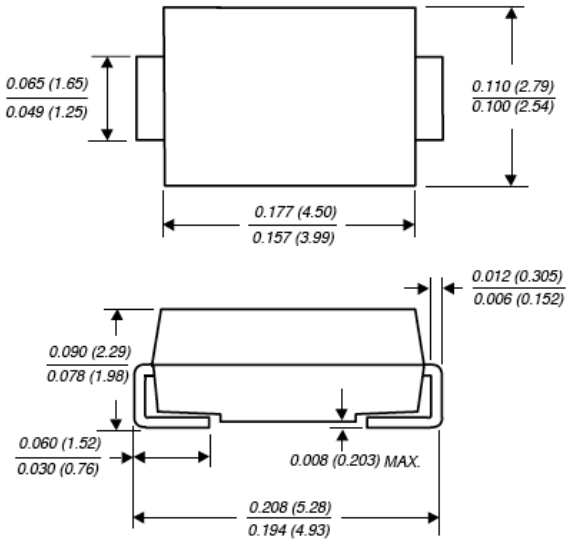
Case: JEDEC DO-214AC molded plastic body

Terminals: Solder plated, solderable per MIL-STD-750,Method 2026

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℃ 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	Trr	30				50	nS
Typical junction capacitance	Cj	25				19	PF
Maximum thermal resistance	$R_{\theta JA}$	75					℃/W
	$R_{\theta JL}$	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

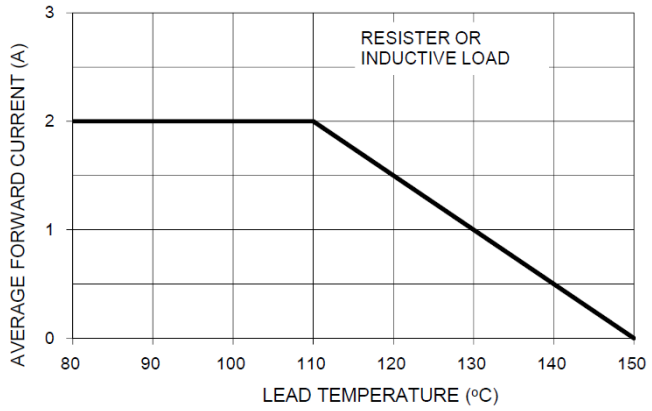


FIG. 2 MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

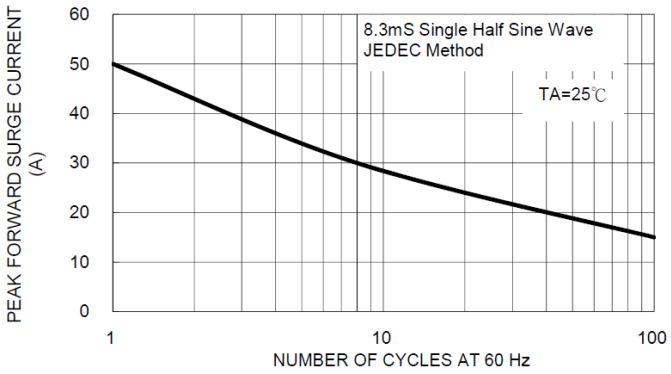


FIG. 3 TYPICAL FORWARD CHARACTERISTICS

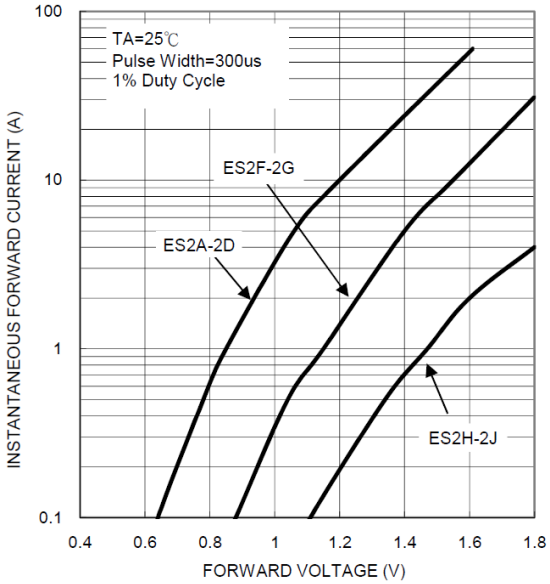


FIG. 4 TYPICAL REVERSE CHARACTERISTICS

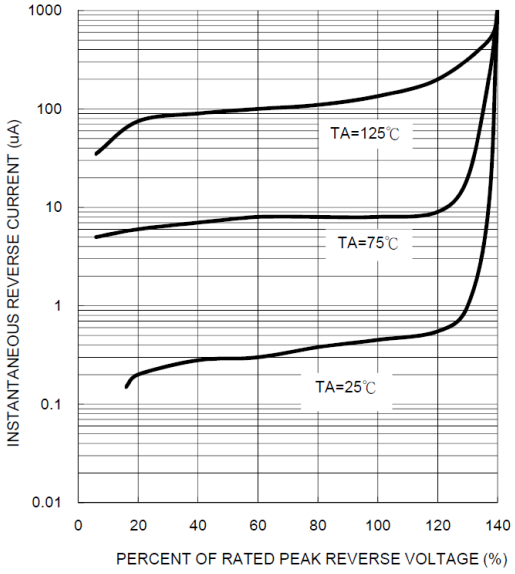


FIG. 5 TYPICAL JUNCTION CAPACITANCE