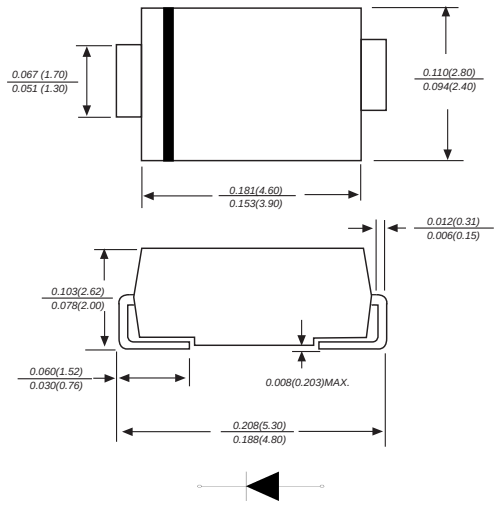
ES1J

1.0Amp Super Fast Recovery Surface Mounted Rectifiers

Features

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Idea for printed circuit board
- Glass passivated Junction chip
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed 260℃/10 seconds at terminals

DO-214AC/SMA



Dimensions in inches and (millimeters)

Mechanical Data

Case : Molded plastic body
Terminals : Solder plated, solderable per MIL-STD-750,Method 2026
Polarity : Polarity symbol marking on body
Mounting Position : Any
Weight : 0.0023 ounce, 0.07 grams

Maximum Ratings And Electrical Characteristics

MARKING:ES1J

Ratings at 25℃ ambient temperature unless otherwise specified. Single phase half-wave 60Hz,resistive or inductive load, for capacitive load current derate by 20%.

Parameter	SYMBOLS	ES1J	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	600	V
Maximum RMS voltage	V_{RMS}	420	V
Maximum DC blocking voltage	V_{DC}	600	V
Maximum average forward rectified current at T_L=100℃	$I_{(AV)}$	1.0	A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	30.0	A
Maximum instantaneous forward voltage at 1.0A	V_F	1.7	V
Maximum DC reverse current T_A =25℃ at rated DC blocking voltage T_A=125℃	I_R	5.0 200	u A
Maxinum reverse recovery time(Note 1)	Trr	35	ns
Typical junction capacitance (Note2)	C_J	18.0	pF
Typical thermal resistance	R_{qJA}	80.0	°C/W
Operating junction and storage temperature range	T_J,T_{STG}	-55 to +150	°C

Note: 1.Reverse recovery time test condition: IF=0.5A IR=1.0A Irr=0.25A
2.Measured at 1MHz and applied reverse voltage of 4.0V D.C.

Ratings And Characteristic Curves

FIG. 1- DERATING CURVE OUTPUT RECTIFIED CURRENT

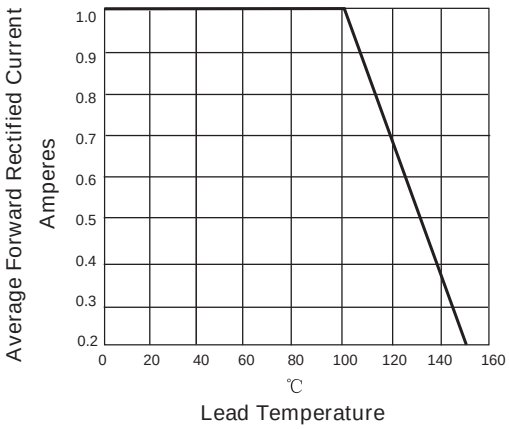


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PERLEG

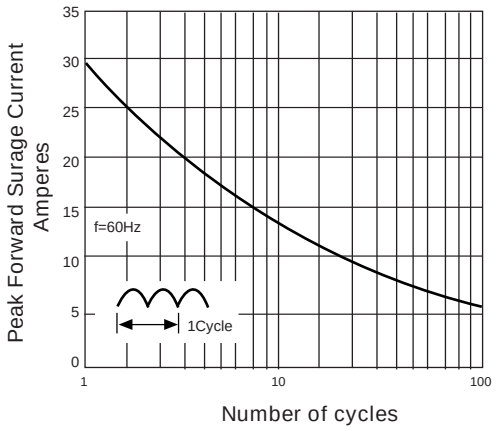


FIG. 3-TYPICAL FORWARD VOLTAGE CHARACTERISTICS

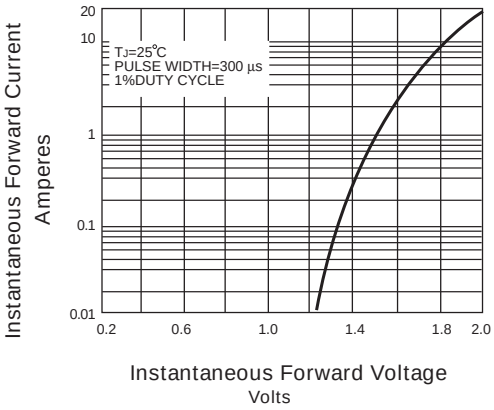


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS

