HFZT

ES1AW ---ES1JW

SUPER FAST RECTIFIERS

VOLTAGE RANGE: 50--- 600V
CURRENT: 1.0 AV

FEATURES

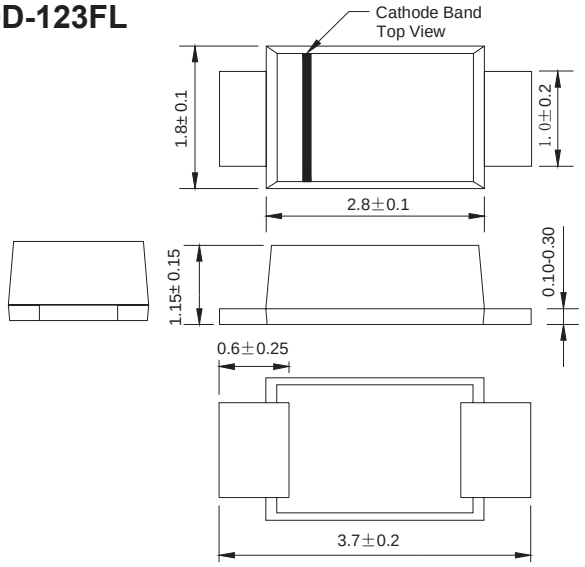
- ●Glass passivated device
- ●Ideal for surface mouted applications
- ●Low reverse leakage
- ●Metallurgically bonded construction
- ●High temperature soldering guaranteed:

250 C/10 seconds,0.375”(9.5mm) lead length, 5 lbs. (2.3kg) tension

MECHANICAL DATA

- ●Case: SOD-123FL molded plastic body
- ●Terminals: Solder plated, solderable per MIL-STD-750, Method 2026
- ●Polarity: Color band denotes cathode end
- ●Mounting Position: Any

SOD-123FL



Dimensions in millimeters

MAXIMUM RATINGS AND CHARACTERISTICS

@ 25°C Ambient Temperature (unless otherwise noted)Single phase,half wave,60 Hz,resistive or inductive load.
For capacitive load,derate by 20%.

	SYMBOLS	ES1AW EA	ES1BW EB	ES1CW EC	ES1DW ED	ES1EW EE	ES1GW EG	ES1JW EJ	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	50	100	150	200	300	400	600	VOLTS
Maximum RMS voltage	V_{RMS}	35	70	105	140	210	280	420	VOLTS
Maximum DC blocking voltage	V_{DC}	50	100	150	200	300	400	600	VOLTS
Maximum average forward rectified current	$I_{(AV)}$	1.0							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	25.0							Amps
Maximum instantaneous forward voltage at1.0A	V_F	0.95				1.25		1.7	Volts
Maximum DC reverse current T_A=25℃ at rated DC blocking voltage T_A=100℃	I_R	5.0 100.0							μA
Maximum reverse recovery time (NOTE 1)	trr	35							ns
Typical junction capacitance (NOTE 2)	C_J	10							pF
Typical thermal resistance (NOTE 3)	$R_{\theta JA}$	85							K/W
Operating junction and storage temperature range	T_J,T_{STG}	-55 to +150							°C

Note: 1.Measured with IF=0.5A, IR=1A, Irr=0.25A.
2.Measured at 1MHz and applied reverse voltage of 4.0V D.C.
3.PCB mounted on 0.2*0.2" (5.0*5.0mm) coppeer pad area.

RATINGS AND CHARACTERISTIC CURVES

FIG. 1- FORWARD CURRENT DERATING CURVE

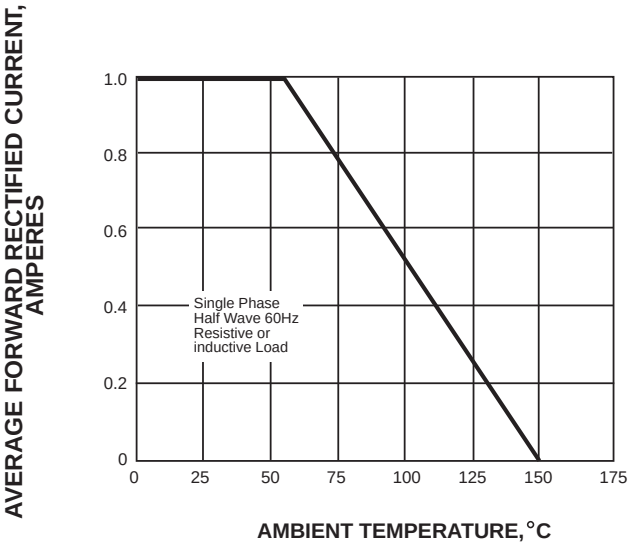


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

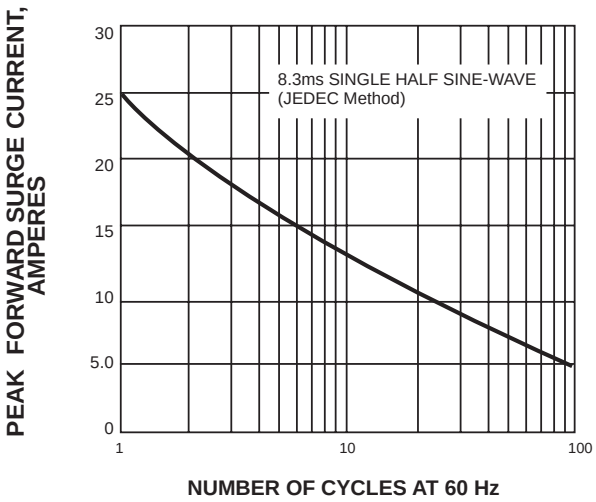


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

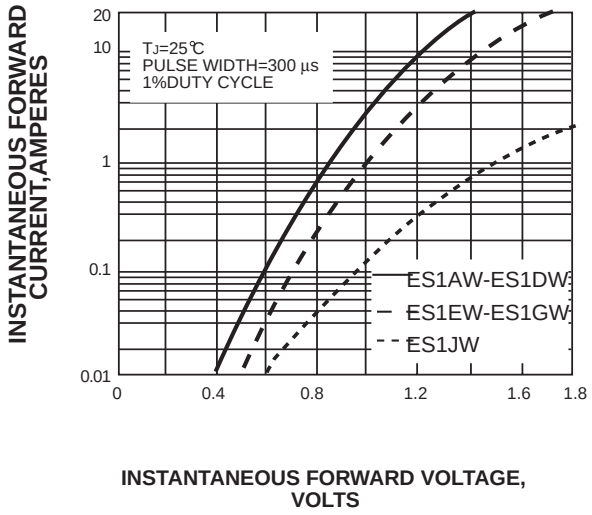


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

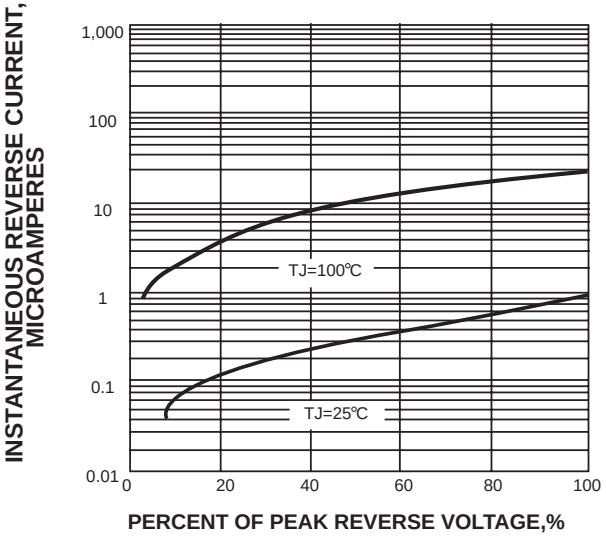


FIG. 5-TYPICAL JUNCTION CAPACITANCE

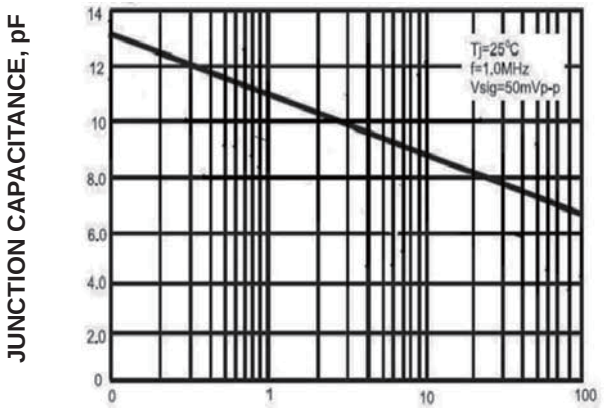


FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE