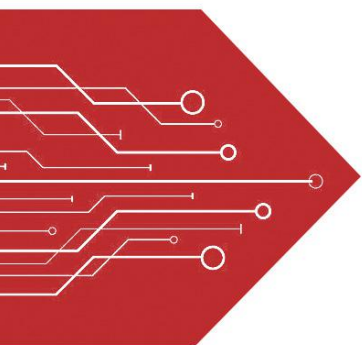


MSKSEMI

SEMICONDUCTOR



ESD



TVS



TSS



MOV



GDT



PLED

Product data sheet



SOD-123FL

FEATURES

- * Ideal for surface mount applications
- * Easy pick and place
- * Built-in strain relief
- * Low forward voltage drop

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy: UL 94V-0 rate flame retardant
- * Metallurgically bonded construction
- * Polarity: Color band denotes cathode end
- * Mounting position: Any

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Rating 25°C ambient temperature unless otherwise specified.
 Single phase half wave, 60Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

	P/N	DS12W -MS	DS13W -MS	DS14W -MS	DS15W -MS	DS16W -MS	DS18W -MS	DS19W -MS	DS110W -MS	
	MARK	K12	K13	K14	K15	K16	K18	K19	K110	UNITS
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	20	30	40	50	60	80	90	100	V
Maximum RMS Voltage	V _{RMS}	14	21	28	35	42	56	63	70	V
Maximum DC Blocking Voltage	V _{DC}	20	30	40	50	60	80	90	100	V
Maximum Average Forward Rectified Current (See Fig. 1)	I _(AV)	1.0								A
Peak Forward Surge Current, 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}	30								A
Maximum Instantaneous Forward Voltage at 1.0A	V _F	0.55			0.70		0.85			V
Maximum DC Reverse Current Ta=25℃	I _R	0.2								mA
at Rated DC Blocking Voltage Ta=100℃		10								mA
Typical Junction Capacitance (Note1)	C _J	110								pF
Operating Temperature Range T _J	T _J	-65 — +125					-65 — +150			℃
Storage Temperature Range T _{STG}	T _{STG}	-65 — +150								℃

NOTES:

1. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2. Thermal Resistance Junction to Ambient.

RATING AND CHARACTERISTIC CURVES (K12 THRU K110)

FIG.1-TYPICAL FORWARD CURRENT DERATING CURVE

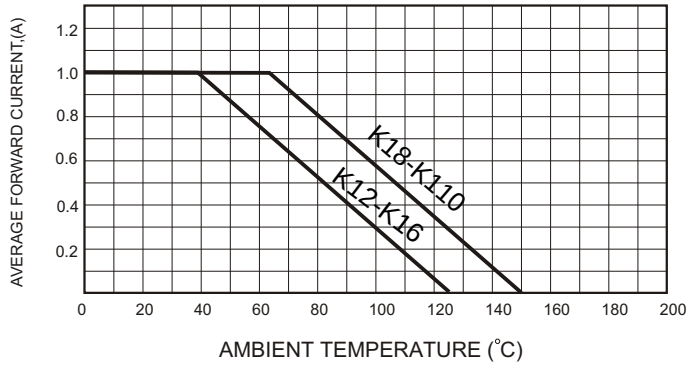


FIG.2-TYPICAL FORWARD CHARACTERISTICS

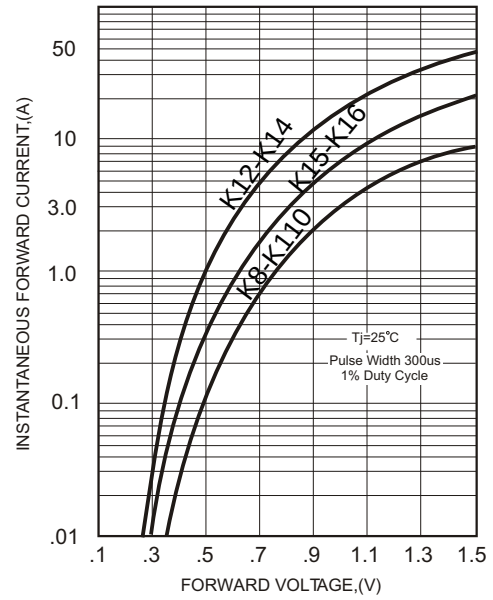


FIG.3-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

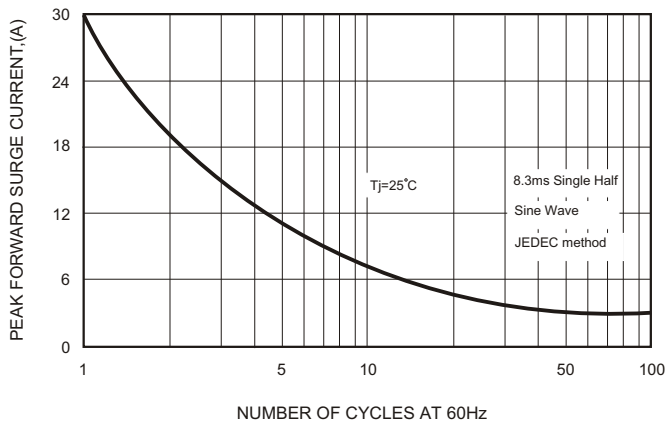


FIG.5 - TYPICAL REVERSE CHARACTERISTICS

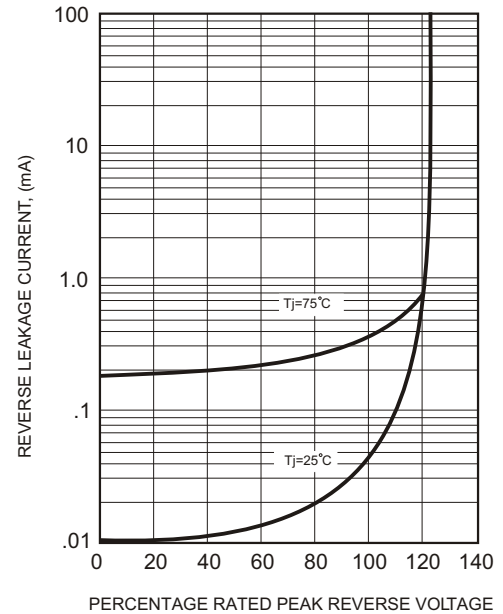
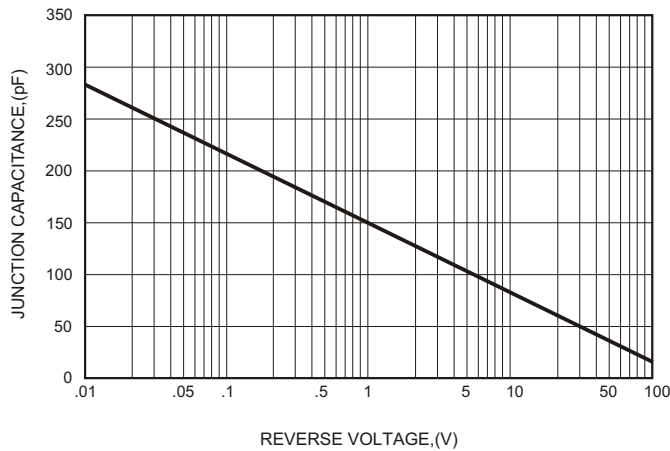
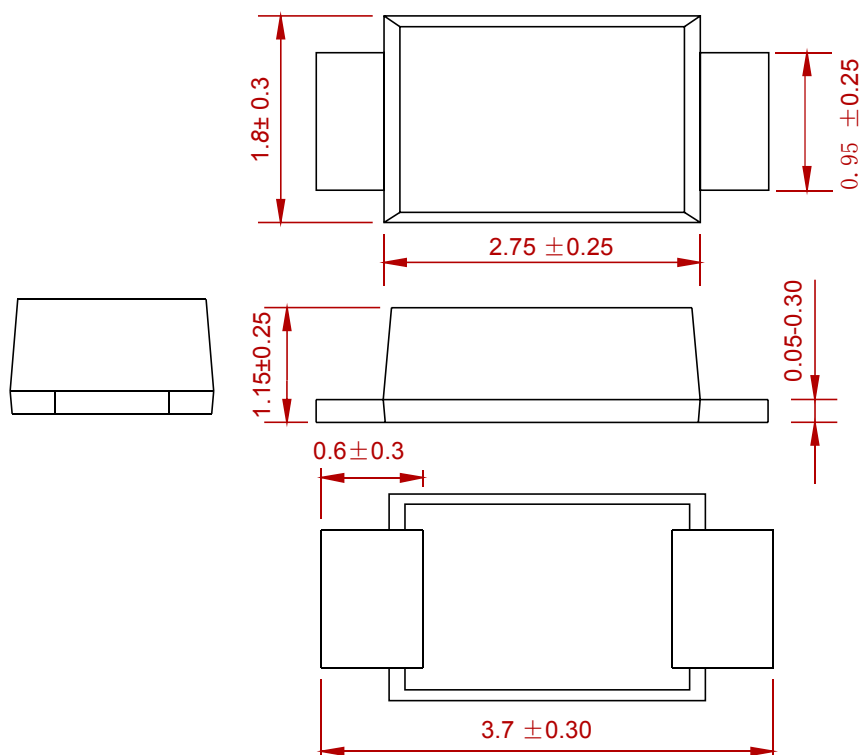


FIG.4-TYPICAL JUNCTION CAPACITANCE

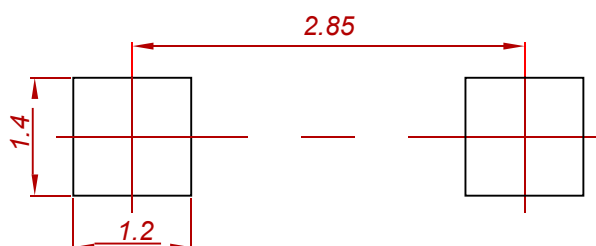


PACKAGE MECHANICAL DATA



Dimensions in millimeters

Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.05 mm.
3. The pad layout is for reference purposes only.

REEL SPECIFICATION

P/N	PKG	QTY
DS12W-MS THRU DS110W-MS	SOD-123FL	3000

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