

<p>SURFACE MOUNT GLASS SUPERFAST RECOVERY RECTIFIERS</p>	<p>REVERSE VOLTAGE - 50 to 600 Volts FORWARD CURRENT - 1.0 Amperes</p>
<p>FEATURES</p> <ul style="list-style-type: none"> ● Super fast switching time for high efficiency ● Low forward voltage drop and high current capability ● Low reverse leakage current ● Plastic material has UL flammability classification 94V-0 <p>MECHANICAL DATA</p> <ul style="list-style-type: none"> ● Case: Molded Plastic ● Polarity: Indicated by cathode band ● Weight: 0.002 ounces, 0.064 grams ● Mounting position: Any 	<p>SMA</p> <p style="text-align: center;">Dimensions in inches and (millimeters)</p>

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

CHARACTERISTICS	SYMBOL	ES1A	ES1B	ES1D	ES1G	ES1J	UNIT
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	50	100	200	400	600	V
Maximum RMS Voltage	V _{RMS}	35	70	140	280	420	V
Maximum DC Blocking Voltage	V _{DC}	50	100	200	400	600	V
Maximum Average Forward Rectified Current @T _A =55 °C	I _(AV)	1.0					A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	I _{FSM}	30					A
Peak Forward Voltage at 1.0A DC	V _F	0.95			1.25		V
Maximum DC Reverse Current at Rated DC Blocking Voltage @T _J =25°C @T _J =100°C	I _R	5.0 100					μA
Maximum Reverse Recovery Time(Note 1)	T _{RR}	35					nS
Typical Junction Capacitance (Note2)	C _J	30			25		pF
Typical Thermal Resistance (Note3)	R _{θJA}	40					°C/W
Operating Temperature Range	T _J	-55 to +150					°C
Storage Temperature Range	T _{STG}	-55 to +150					°C

NOTES: 1.Measured with I_F=0.5A, I_R=1A, I_{RR}=0.25A
2.Measured at 1.0 MHz and applied reverse voltage of 4.0V DC
3.Thermal resistance junction of ambient.

FIG. 1 – FORWARD CURRENT DERATING CURVE

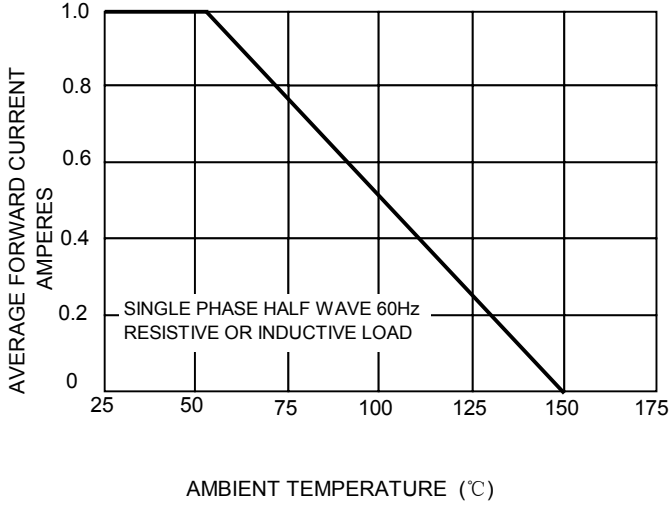


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

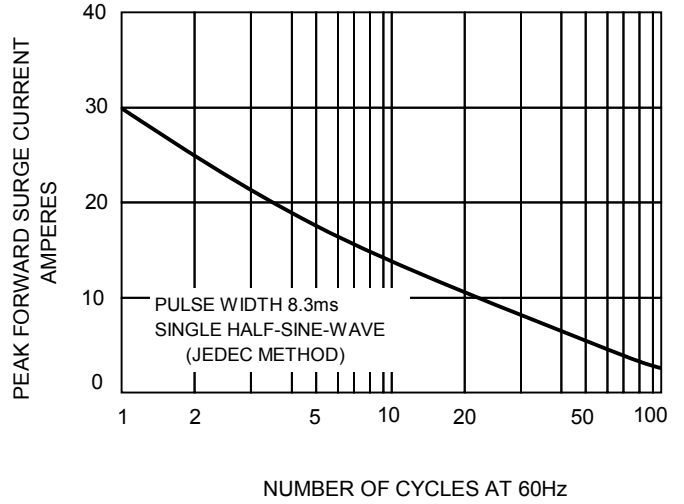


FIG.3 – TYPICAL JUNCTION CAPACITANCE

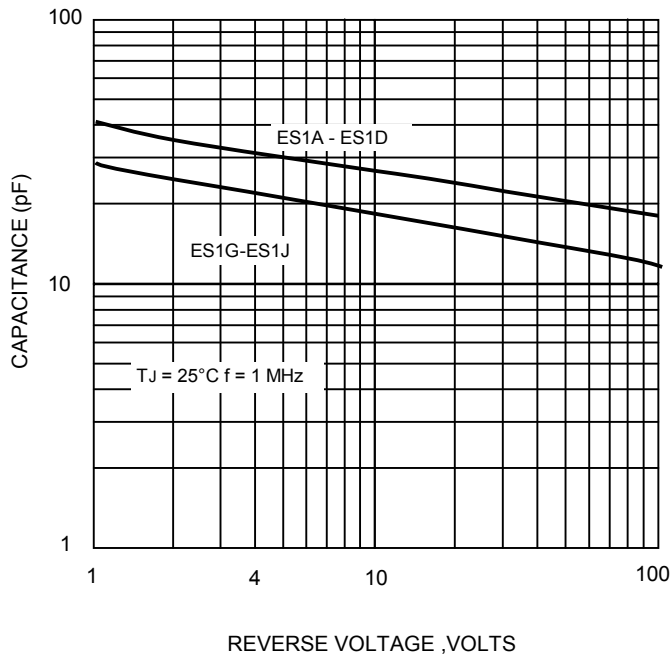


FIG.4-TYPICAL FORWARD CHARACTERISTICS

