

Surface Mount Super Fast Glass Passiva TED Rectifiers
Features

- 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

Mechanical Data

- **Case:** JEDEC DO-214AC molded plastic
- **Polarity:** Color band denotes cathode
- **Mounting position:** Any
- **Weight:** 0.003 ounce, 0.093 grams

Maximum Ratings & Thermal Characteristics (T_A = 25 °C unless otherwise noted)

Characteristic	Symbols	ES2A	ES2B	ES2D	ES2G	ES2J	UNITS
Maximum repetitive 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 0.375" (9.5mm) lead length at T _A =75°C	I _(AV)	2.0					A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method) T _A =75°C	I _{FSM}	75					A
Maximum instantaneous forward voltage at 1.0A	V _F	0.95			1.25	1.7	V
Maximum DC reverse current T _j = 25°C at rated DC blocking voltage T _j =100°C	I _R	5.0 100.0					μA
Maximum reverse recovery time	t _{rr}	35					ns
Typical junction capacitance	C _J	40			30		pF
Typical thermal resistance	R _{θJA}	25					°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 to ambient.

Typical Characteristics

FIG. 1 – FORWARD CURRENT DERATING CURVE

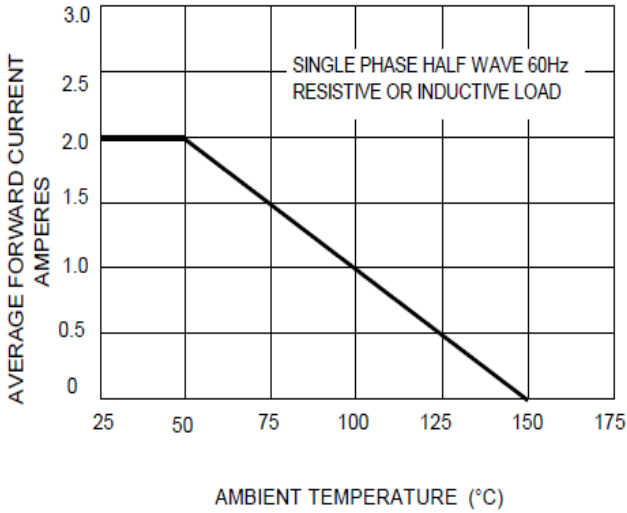


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

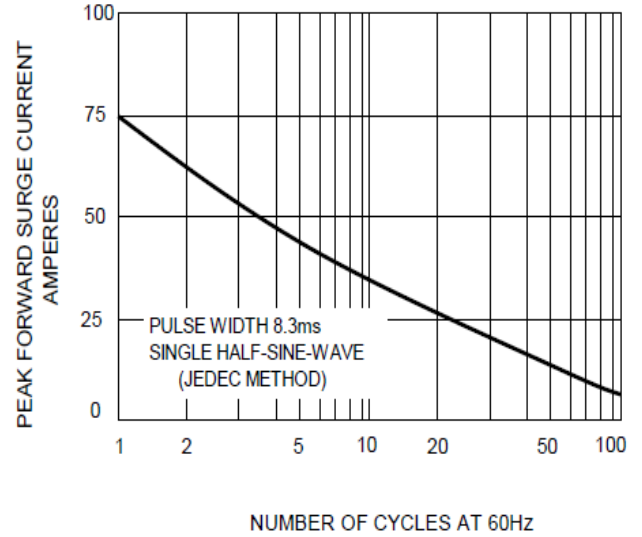


FIG.3 – TYPICAL JUNCTION CAPACITANCE

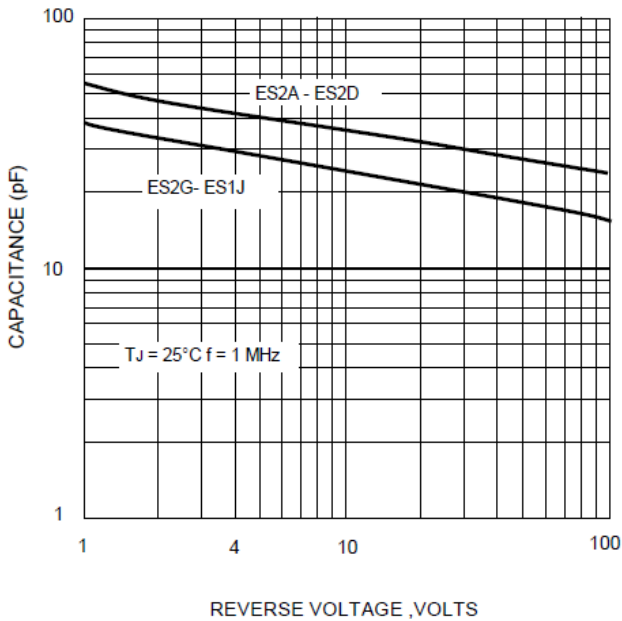
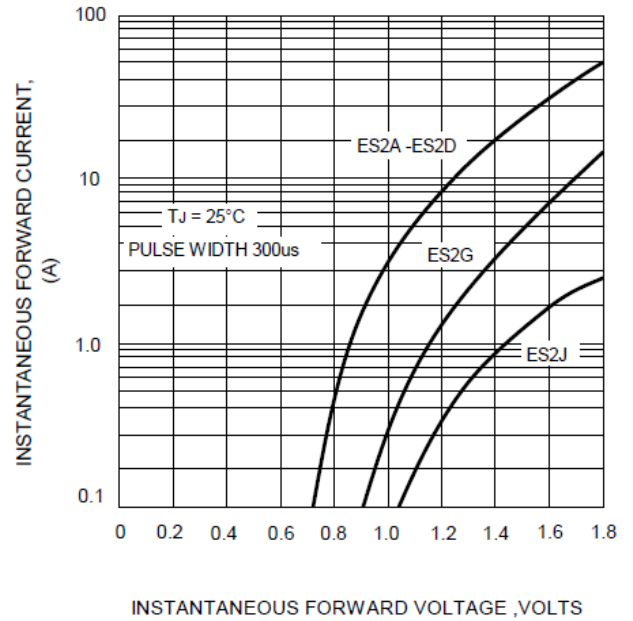
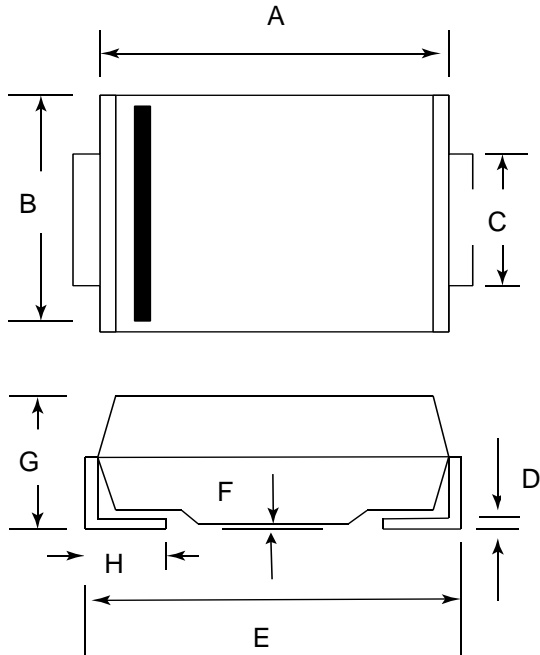


FIG.4-TYPICAL FORWARD CHARACTERISTICS



Package Outline Dimensions



Dim	Millimeters		Inches	
	Min	Max	Min	Max
A	3.99	4.50	0.157	0.177
B	2.54	2.79	0.100	0.110
C	1.25	1.65	0.049	0.065
D	0.152	0.305	0.006	0.012
E	4.93	5.28	0.194	0.208
F	----	0.203	----	0.008
G	1.98	2.29	0.078	0.090
H	0.76	1.52	0.030	0.060