

**SURFACE MOUNT  
SUPER FAST RECTIFIERS**

**REVERSE VOLTAGE – 50 to 600 Volts  
FORWARD CURRENT – 2.0 Amperes**

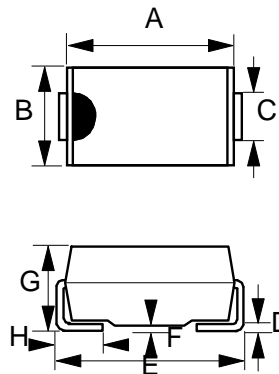
**FEATURES**

- Glass passivated chip
- Super fast switching for high efficiency
- For surface mounted applications
- Low forward voltage drop and high current capability
- Low reverse leakage current

**MECHANICAL DATA**

- Case :molded plastic
- Case Material: "Green" molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl.) "Halogen-free"
- Polarity : Indicated by cathode band
- Weight : 0.07grams(Approximate)
- Moisture Sensitivity: Level 1 per J-STD-020C
- Lead free finish, RoHS compliant

**SMA**



SMA		
DIM	MIN	MAX
A	4.06	4.57
B	2.29	2.92
C	1.27	1.63
D	0.15	0.31
E	4.83	5.59
F	0.05	0.20
G	2.01	2.40
H	0.76	1.52

All dimensions in millimeters

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25°C ambient temperature unless otherwise specified.

**ABSOLUTE RATINGS**

MARKING CODE		ES2AA	ES2BA	ES2CA	ES2DA	ES2GA	ES2JA	
PARAMETER	SYMBOL	VALUE						UNIT
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	150	200	400	600	V
Maximum DC blocking voltage	$V_{DC}$	50	100	150	200	400	600	V
Maximum Average rectified output current	$I_{(AV)}$	2.0						A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load.	$I_{FSM}$	50						A
Operating and Storage temperature range	$T_J, T_{STG}$	-55 to +150						°C

**STATIC ELECTRICAL CHARACTERISTICS**

PARAMETER	TEST CONDITION	SYMBOL	MAX				UNIT
Forward voltage (Note1)	$I_F=2A, T_J=25°C$	$V_F$	0.92		1.25	1.30	V
Maximum DC Reverse current at Rated DC Blocking voltage	$T_J=25°C, T_J=125°C$	$I_R$	5.0		200		uA
Typical junction capacitance (Note 2)		$C_j$	25				pF

**THERMAL CHARACTERISTICS**

PARAMETER	SYMBOL	TYP		UNIT
Typical thermal resistance (Note3)	$R_{thJL}$	20	25	°C/W

**DYNAMIC ELECTRICAL CHARACTERISTICS**

PARAMETER	TEST CONDITION	SYMBOL	MAX		UNIT
Reverse Recovery Time	$I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$	$T_{rr}$	25	35	nS

**Note :**

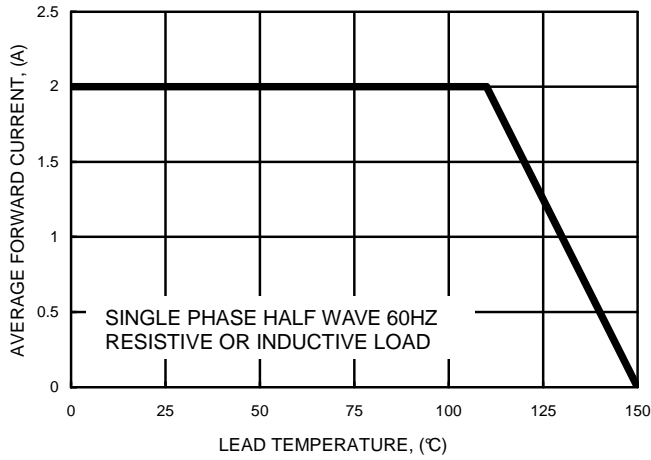
- (1) 300us pulse width, 2% duty cycle.
- (2) Measured at 1.0MHz and applied reverse voltage of 4.0  $V_{DC}$
- (3) Thermal Resistance Junction to Lead

REV. 8 Aug.-2015, KSGA02

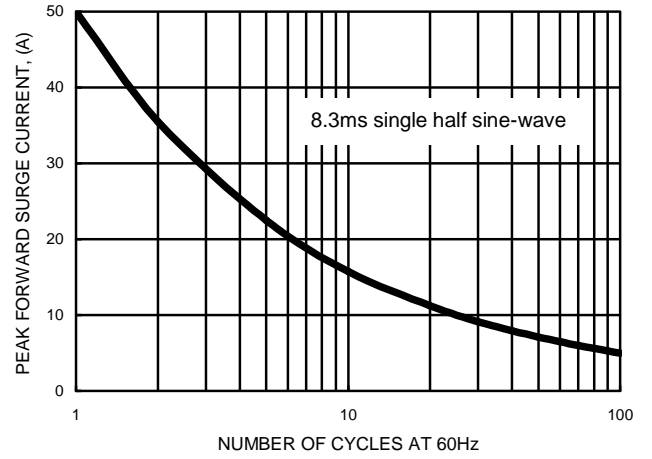
**RATING AND CHARACTERISTIC CURVES**  
**ES2AA thru ES2JA**



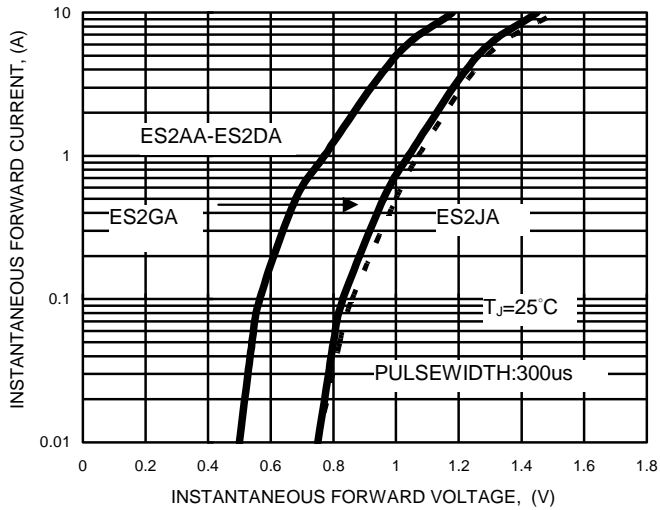
**FIG.1- FORWARD CURRENT DERATING CURVE**



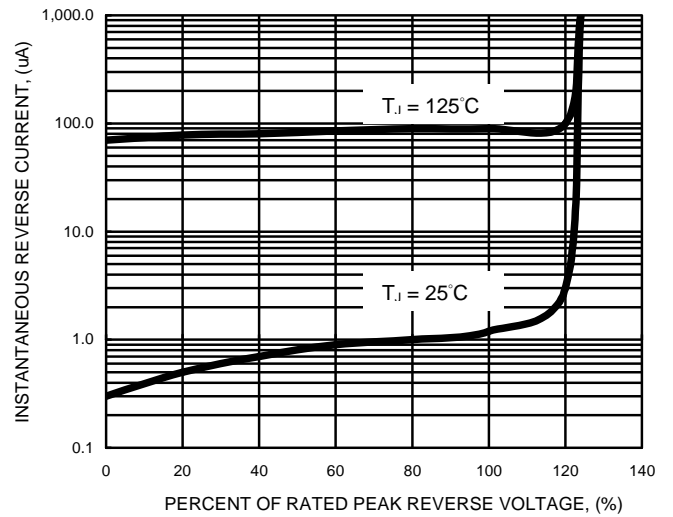
**FIG.2- MAXIMUM NON-REPETITIVE SURGE CURRENT**



**FIG.3- TYPICAL FORWARD CHARACTERISTICS**



**FIG.4- TYPICAL REVERSE CHARACTERISTICS**



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