



# ES2ABF THRU ES2JBF

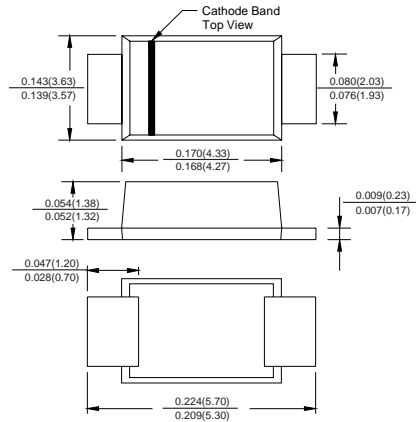
## SURFACE MOUNT SUPER FAST RECTIFIER

Reverse Voltage - 50 to 600 Volts Forward Current - 2.0 Ampere

### FEATURES

The plastic package carries Underwriters Laboratory  
 Flammability Classification 94V-0  
 For surface mounted applications  
 Super fast switching for high efficiency  
 Low reverse leakage  
 Built-in strain relief, ideal for automated placement  
 High forward surge current capability  
 High temperature soldering guaranteed:  
 260°C/10 seconds at terminals  
 Glass passivated chip junction

### SMBF



Dimensions in inches and (millimeters)

### MECHANICAL DATA

**Case:** JEDEC SMBF molded plastic body over passivated chip  
**Terminals:** Solder plated, solderable per MIL-STD-750, Method 2026  
**Polarity:** Color band denotes cathode end  
**Mounting Position:** Any  
**Weight:** 0.0018 ounce, 0.05 grams

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	SYMBOLS	ES2ABF	ES2BBF	ES2CBF	ES2DBF	ES2EBF	ES2GBF	ES2JBF	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 at $T_L=100^\circ\text{C}$	$I_{(AV)}$	2.0							Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	50							Amps
Maximum instantaneous forward voltage at 2.0A	$V_F$	0.95				1.25		1.7	Volts
Maximum DC reverse current at rated DC blocking voltage $T_A=25^\circ\text{C}$ $T_A=125^\circ\text{C}$	$I_R$	5.0 100.0							$\mu\text{A}$
Maximum reverse recovery time (NOTE 1)	$t_{rr}$	35							ns
Typical junction capacitance (NOTE 2)	$C_J$	62.0							pF
Typical thermal resistance (NOTE 3)	$R_{\theta JA}$	38.0							$^\circ\text{C/W}$
Operating junction and storage temperature range	$T_{J, STG}$	-55 to +150							$^\circ\text{C}$

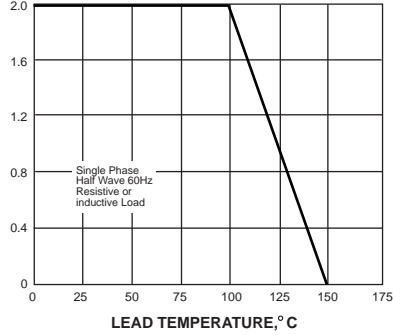
**Note:** 1. Reverse recovery condition  $I_F=0.5\text{A}$ ,  $I_R=1.0\text{A}$ ,  $I_{rr}=0.25\text{A}$   
 2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.  
 3. P.C.B. mounted with 0.2x0.2" (5.0x5.0mm) copper pad areas



# RATINGS AND CHARACTERISTIC CURVES ES2ABF THRU ES2JBF

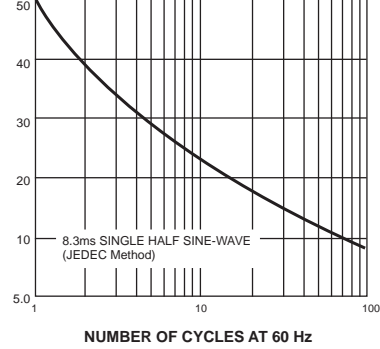
AVERAGE FORWARD RECTIFIED CURRENT, AMPERES

FIG. 1- FORWARD CURRENT DERATING CURVE



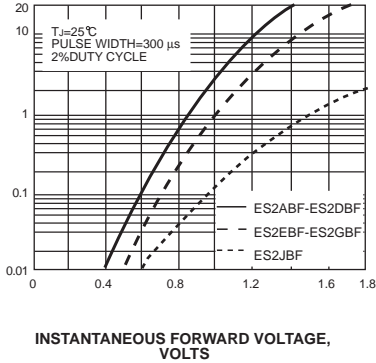
PEAK FORWARD SURGE CURRENT, AMPERES

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



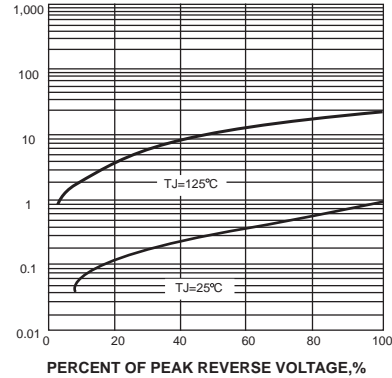
INSTANTANEOUS FORWARD CURRENT, AMPERES

FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS



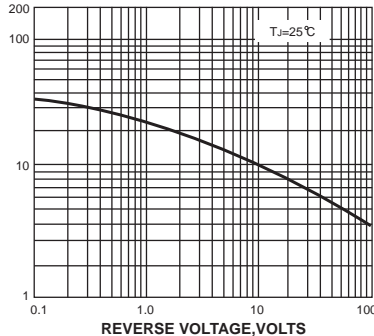
INSTANTANEOUS REVERSE CURRENT, MICROAMPERES

FIG. 4-TYPICAL REVERSE CHARACTERISTICS



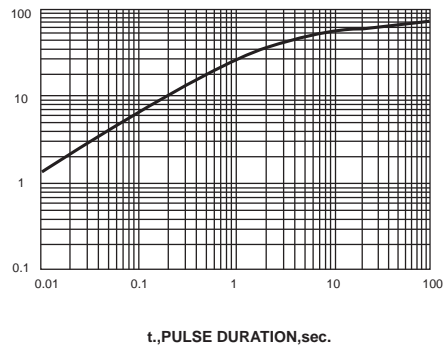
JUNCTION CAPACITANCE, pF

FIG. 5-TYPICAL JUNCTION CAPACITANCE



TRANSIENT THERMAL IMPEDANCE, °C/W

FIG. 6-TYPICAL TRANSIENT THERMAL IMPEDANCE



单击下面可查看定价，库存，交付和生命周期等信息

[>>ZG\(中鑫半导体\)](#)