UTC UNISONIC TECHNOLOGIES CO., LTD

ES2J **DIODE**

SURFACE MOUNT SUPER FAST **RECTIFIER**

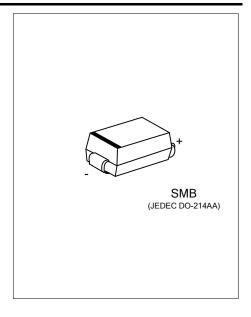
DESCRIPTION

The UTC ES2J is a surface mount super fast rectifier, it uses UTC's advanced technology to provide customers with high forward surge current and low reverse leakage, etc.

The UTC **ES2J** is suitable for surface mounted applications.

FEATURES

- * Low reverse leakage
- * High forward surge current capability



SYMBOL



ORDERING INFORMATION

Ordering Number		Deelsese	Pin Assignment		Daakina	
Lead Free	Halogen Free	Package	1	2	Packing	
ES2JL-SMB-R	ES2JG-SMB-R	SMB	K	Α	Tape Reel	

Note: Pin Assignment: A: Anode K: Cathode



MARKING



www.unisonic.com.tw 1 of 4 ES2J DIODE

ABSOLUTE MAXIMUM RATINGS

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%.

PARAMETER	SYMBOL	RATINGS	UNIT
Working Peak Reverse Voltage	V_{RWM}	600	V
Repetitive Peak Reverse Voltage	V_{RRM}	600	V
Maximum RMS Reverse Voltage	V_{RMS}	420	V
DC Blocking Voltage	V_R	600	V
Average Rectified Output Current (T _A =55°C)	Ιο	2.0	Α
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Superimposed on Rated Load	I _{FSM}	50	А
Junction Temperature	TJ	-55~+150	°C
Storage Temperature	T _{STG}	-55~+150	°C

Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ THERMAL DATA

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Ambient (Note 3)	θ_{JA}	40	°C/W

■ ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

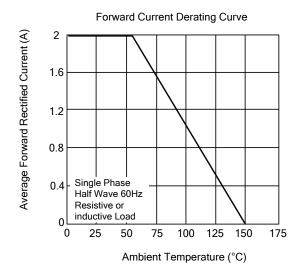
Single phase half-wave 60Hz, resistive or inductive load, for capacitive load current derate by 20%.

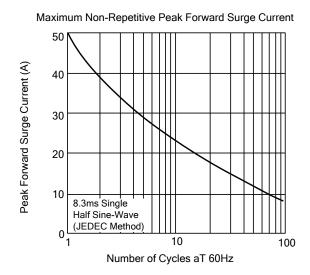
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Instantaneous Forward Voltage	V_{FM}	I _F =2.0A			1.7	V
DC Reverse Current at Rated DC Blocking		T _A =25°C			5	μΑ
Voltage	I _{RM}	T _A =100°C			50	μΑ
Reverse Recovery Time (Note 1)	t _{rr}				35	ns
Junction Capacitance (Note 2)	CJ				60	pF

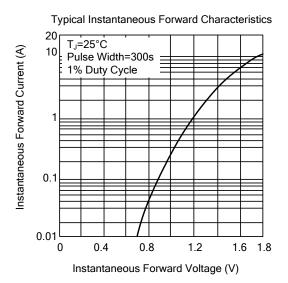
Notes: 1. Reverse recovery condition I_F =0.5A, I_R =1.0A, I_{rr} =0.25A.

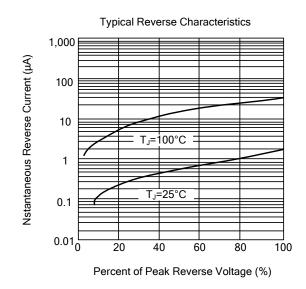
- 2. Measured at 1MHz and applied reverse voltage of 4.0V D.C.
- 3. P.C.B. mounted with 0.2×0.2" (5.0×5.0mm) copper pad areas.

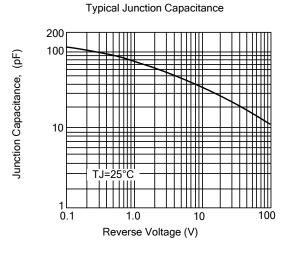
■ TYPICAL CHARACTERISTICS

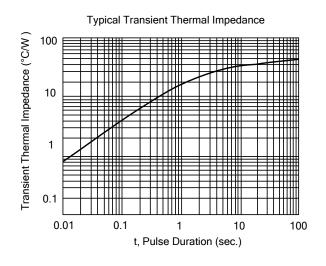












ES2J DIODE

UTC assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all UTC products described or contained herein. UTC products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice.