# Schottky Barrier Diode

## FUJ2E

#### **Features**

- · Compact size, low-profile (h=1.3mm).
- Long battery lifetime realized by employing the schottky barrier diode with low loss characteristics.
- · Various types are available including a large-current (3A)type.
- · Inside-bent pin structure maintains high-reliability.

#### **Applications**

- · Hybrid ICs.
- · High-frequency rectification.
- · Switching regulators.
- · Preventing power supply from counter-flowing.
- Avoiding reverse current by wrong setting of a battery.

#### Structures

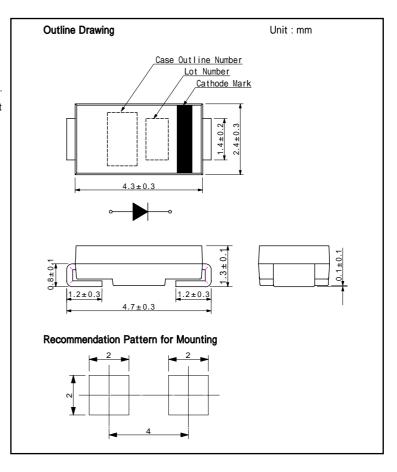
· Resin molded, Silicon Schottky Barrier diode.

· Marking symbol : [ J2E ]

· Weight: 0.04g

 $\cdot \ \text{Terminal plating} : Sn$ 

· Conforms to RoHS regulations



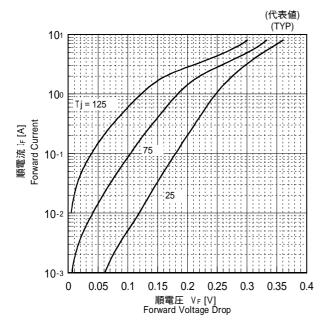
## Absolute Maximum Ratings (Ta=25 )

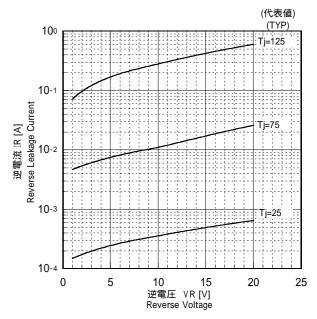
Items	Symbol	Conditions	Ratings	Unit
Repetitive Peak Reverse Voltage	$V_{RM}$		20	V
Non-Repetitive Peak Reverse Voltage	$V_{RSM}$		25	V
Average Forward Current	I o	T =64 , Rectangular wave 180 ° ,VR=5V	3	Α
Peak Forward Surge Current	I <sub>FSM</sub>	Tj=25 ,50Hz,Single-phase,Half sin wave ,Non-Repetitive	30	Α
Operating Junction Temperature	T <sub>j</sub>		-40 ~ +125	
Storage Temperature	T <sub>stg</sub>		-40 ~ +150	

### Electrical Characteristics (Tj=25 )

Items	Symbol	Conditions	TYP.	MAX.	Unit
Forward Voltage Drop	V <sub>F1</sub>	I <sub>F</sub> =1A	0.25	-	V
	$V_{F2}$	$I_F=3A$	0.30	0.33	V
Reverse Current	$I_{R}$	V <sub>R</sub> =20V	-	2.0	mA
Junction Capacitance	Cj	V <sub>R</sub> =10V	180	-	pF
Terminal Resistance(junction to lead)	$R_{th(j-l)}$	Cathode Lead Temperature	-	35	/W

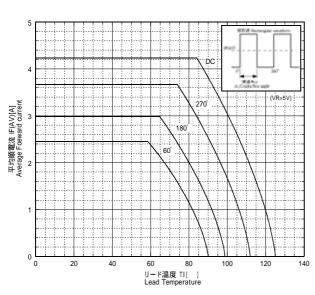
#### Characteristics Diagrams

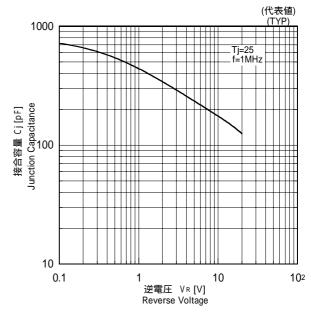




FORWARD CHARACTERISTICS

REVERSE CHARACTERISTICS





AVERAGE RECTIFIED FORWARD CURRENT

TYPICAL JUNCTION CAPACITANCE