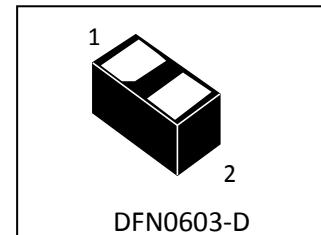


## Schottky Barrier Diode

### 1. FEATURES

- We declare that the material of product compliance with RoHS requirements and Halogen Free.
- S- prefix for automotive and other applications requiring unique site and control change requirements; AEC-Q101 qualified and PPAP capable.
- Extremely small surface mounting type.(DFN0603)
- Low IR.
- High reliability.



### 2. APPLICATIONS

- Low current rectification

### 3. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
RB521ZS-30	S	10000/Tape&Reel

### 4. MAXIMUM RATINGS(Ta = 25°C)

Parameter	Symbol	Limits	Unit
DC Reverse Voltage	VR	30	V
Mean Rectifying Current	IO	100	mA
Peak Forward Surge Current	IFSM	2	A

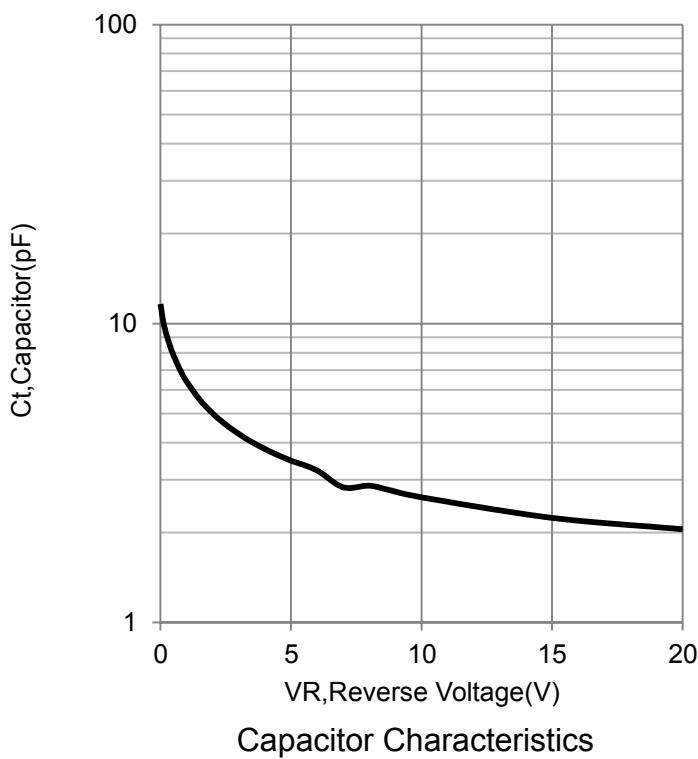
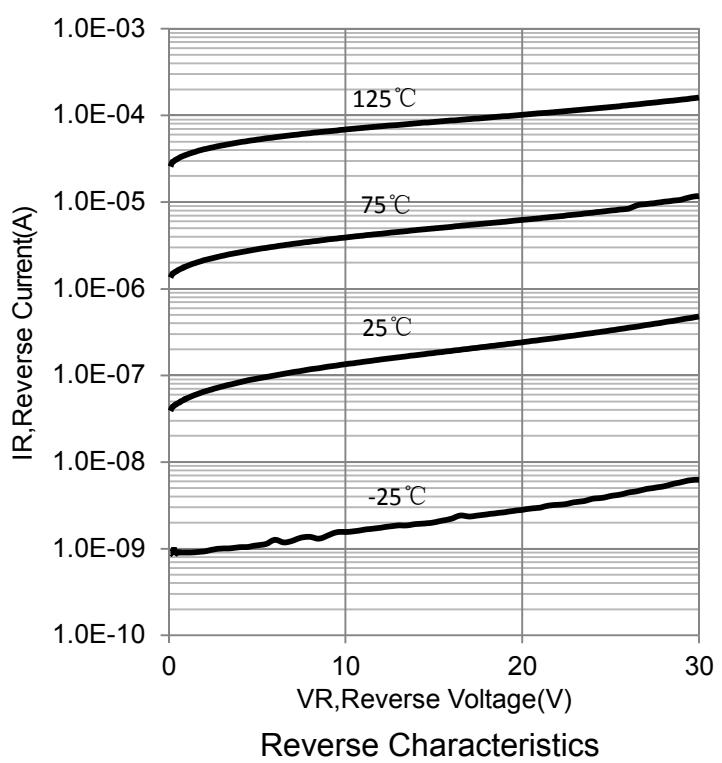
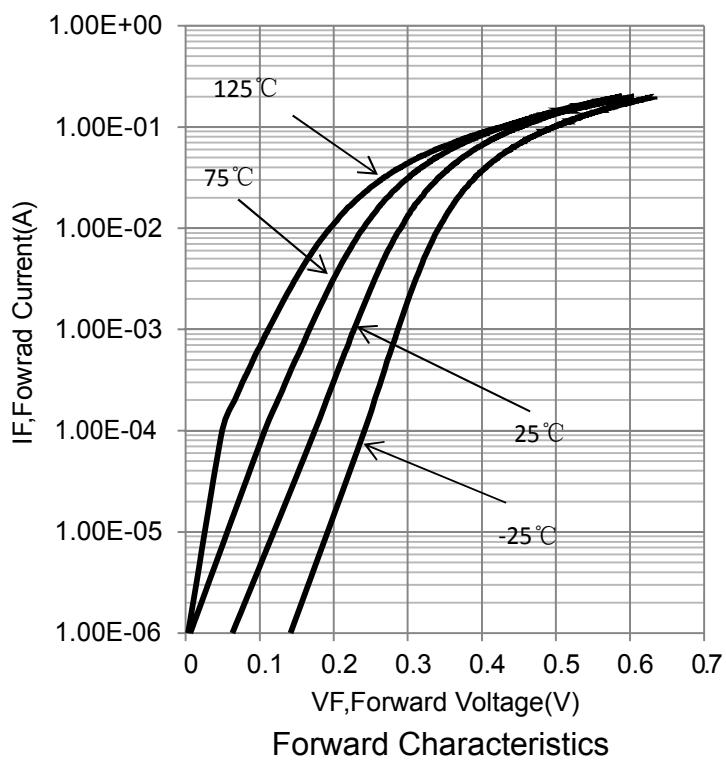
### 5. THERMAL CHARACTERISTICS

Parameter	Symbol	Limits	Unit
Total Device Dissipation, FR-5 Board (Note 1) @ TA = 25°C Derate above 25°C	PD	200 1.58	mW mW/°C
Thermal Resistance, Junction-to-Ambient(Note 1)	R <sub>θJA</sub>	500	°C/W
Junction Temperature	T <sub>J</sub>	125	°C
Storage Temperature Range	T <sub>stg</sub>	-40 ~ +150	°C
Operating Temperature Range	T <sub>op</sub>	-40 ~ +125	°C

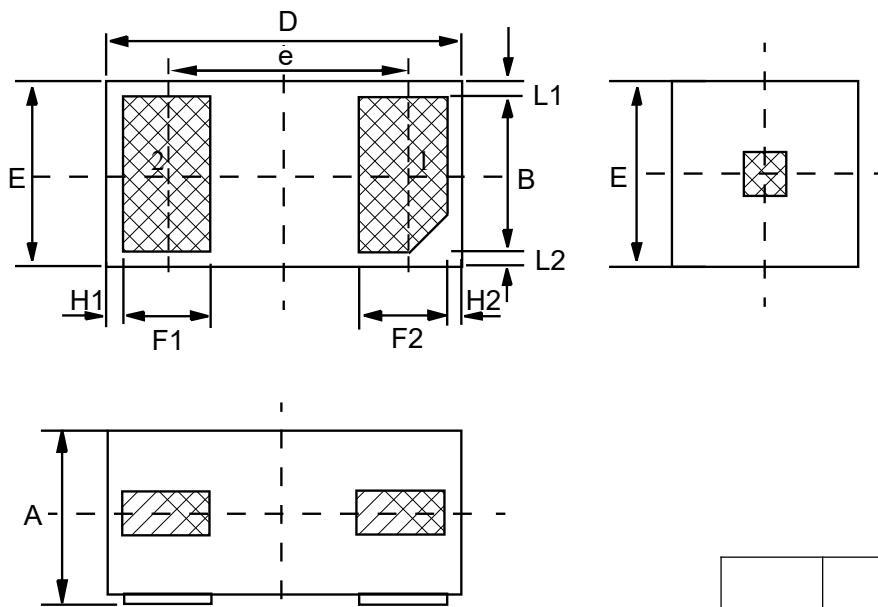
1. FR-5 = 1.0×0.75×0.062 in.

**6. ELECTRICAL CHARACTERISTICS (Ta= 25°C )**

Characteristic	Symbol	Min.	Typ.	Max.	Unit
Reverse Voltage Leakage Current (VR = 10Vdc) (VR = 30Vdc)	IR	-	-	0.35 0.7	µA
Diode Capacitance (VR = 0V , f = 1.0 MHz)	CT	-	8.2	-	pF
Forward Voltage (IF = 100 mAdc) (IF = 10 mAdc)	VF	-	-	0.62 0.5	V

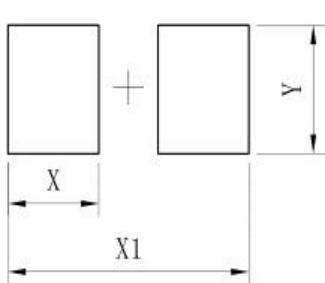
**7. ELECTRICAL CHARACTERISTICS CURVES**

## 8. OUTLINE AND DIMENSIONS



Dim	Millimeters		
	MIN	Typ.	MAX
A	0.270	0.300	0.340
B	0.200	0.250	0.300
D	0.550	0.600	0.650
E	0.250	0.300	0.350
e	-	0.350	-
F1	0.130	0.180	0.230
F2	0.130	0.180	0.230
L1	0.015	0.030	0.045
L2	0.015	0.030	0.045
H1	0.030	0.045	0.060
H2	0.030	0.045	0.060

## 9. SOLDERING FOOTPRINT



DFN0603-DL	
DIM	(mm)
X	0.23
X1	0.61
Y	0.30