

# SCHOTTKY BARRIER DIODE

● **Applications**

Low current rectification

● **Features**

Extremely small surface mounting type. (SOD-723)

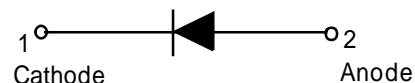
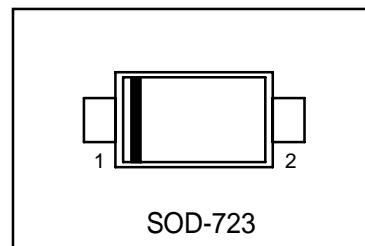
Low IR.

High reliability.

We declare that the material of product compliance with RoHS requirements.

● **Construction**

Silicon epitaxial planar



● **DEVICE MARKING AND ORDERING INFORMATION**

Device	Marking	Shipping
FDR520G	E	8000/Tape&Reel

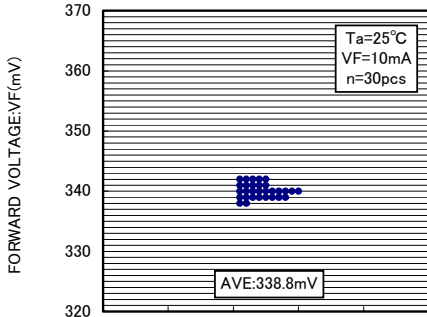
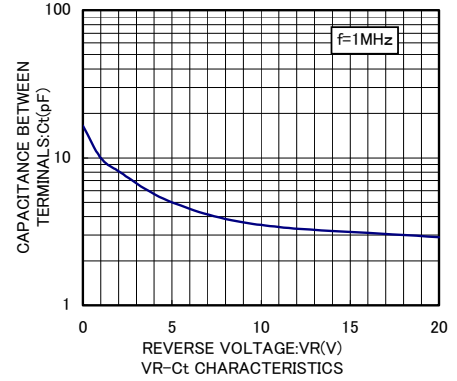
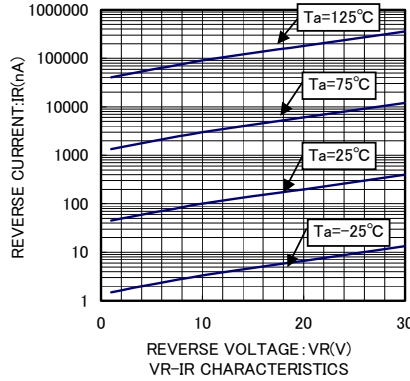
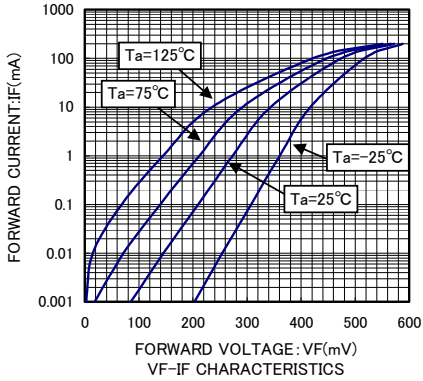
● **Absolute maximum ratings** (Ta=25 °C)

Parameter	Symbol	Limits	Unit
Reverse voltage (DC)	$V_R$	30	V
Average rectified forward current	$I_o$	100	mA
Forward current surge peak(60Hz·1cyc)	$I_{FSM}$	500	mA
Junction temperature	$T_j$	125	°C
Storage temperature	$T_{stg}$	- 40 to +125	°C

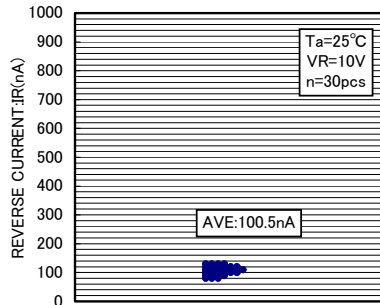
● **Electrical characteristic** (Ta=25 °C)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	$V_F$	-	-	0.45	V	$I_F=10mA$
Forward voltage	$V_F$	-	-	0.50	V	$I_F=20mA$
Reverse current	$I_R$	-		0.5	μA	$V_R=10V$

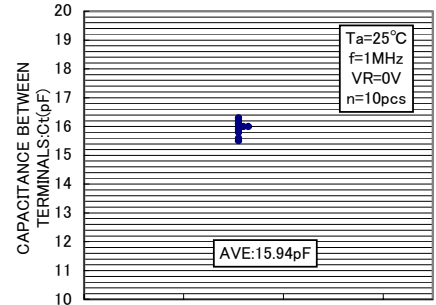
## Electrical characteristic curves (Ta=25 °C)



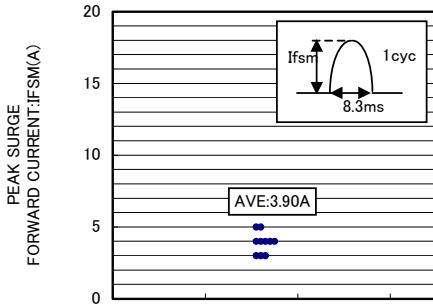
VF DISPERSION MAP



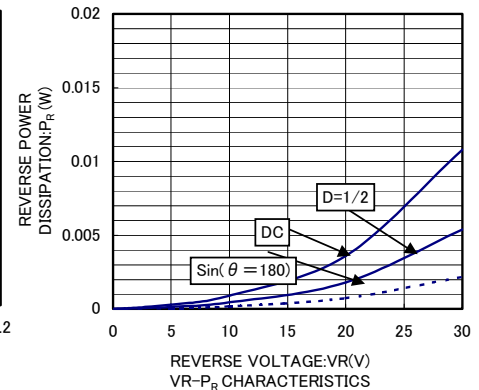
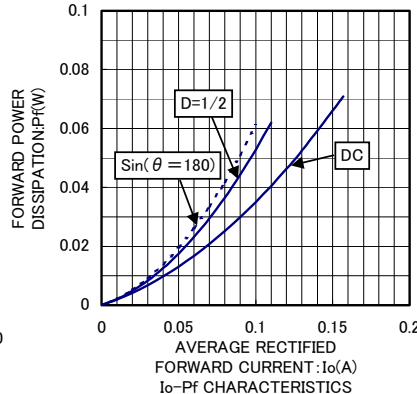
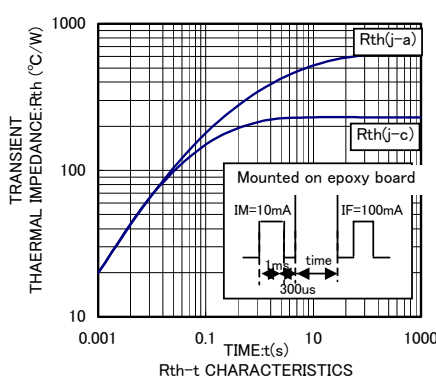
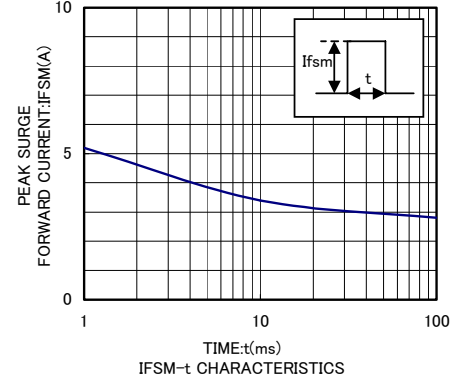
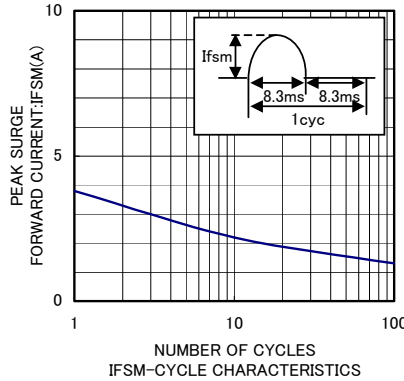
IR DISPERSION MAP



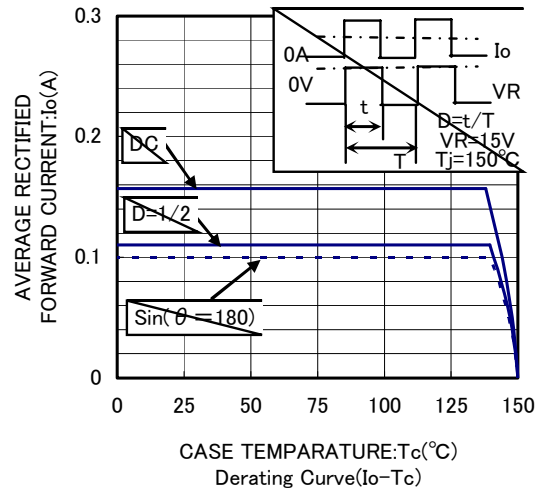
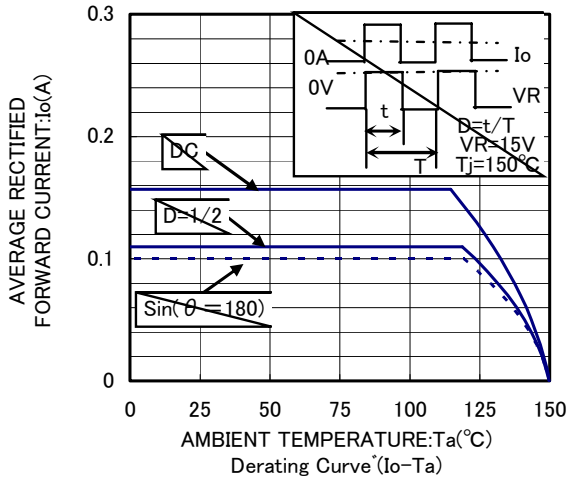
Ct DISPERSION MAP



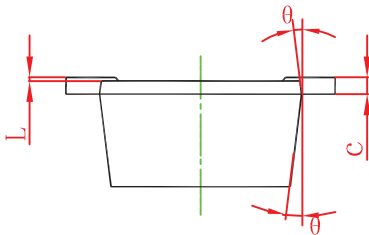
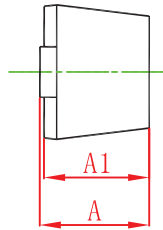
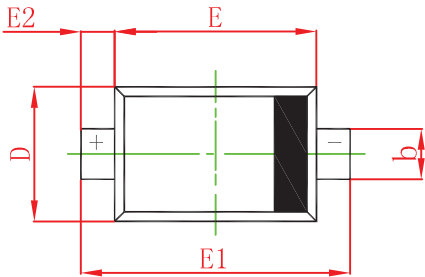
IFSM DISRESION MAP



## Electrical characteristic curves ( $T_a=25^\circ\text{C}$ )

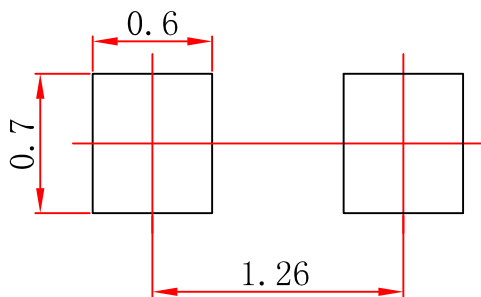


## SOD- 723 Package Outline Dimensions



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.525	0.650	0.021	0.026
A1	0.515	0.580	0.020	0.023
b	0.250	0.350	0.010	0.014
c	0.080	0.150	0.003	0.006
D	0.550	0.650	0.022	0.026
E	0.900	1.100	0.035	0.043
E1	1.300	1.500	0.051	0.059
E2	0.200 REF		0.008 REF	
L	0.010	0.070	0.001	0.003
θ	7° REF		7° REF	

## SOD- 723 Suggested Pad Layout



**Note:**

1. Controlling dimension: in millimeters.
2. General tolerance:  $\pm 0.05$ mm.
3. The pad layout is for reference purposes only.