



Schottky Barrier Diode

RB521S-40

FEATURES

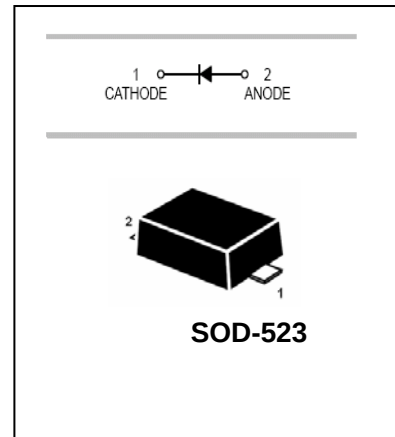
- Low V_F .
- Extremely small mounting type.
- High reliability.



Lead-free

APPLICATIONS

- Rectifying small power .



ORDERING INFORMATION

Type No.	Marking	Package Code
RB521S-40	S	SOD-523

MAXIMUM RATING @ $T_a=25^{\circ}\text{C}$ unless otherwise specified

Parameter	Symbol	Limits	Unit
DC reverse voltage	V_R	40	V
Mean rectifying current	I_O	200	mA
Peak forward surge current	I_{FSM}	4	A
Junction temperature	T_j	150	$^{\circ}\text{C}$
Storage temperature	T_{stg}	-55 to +150	$^{\circ}\text{C}$



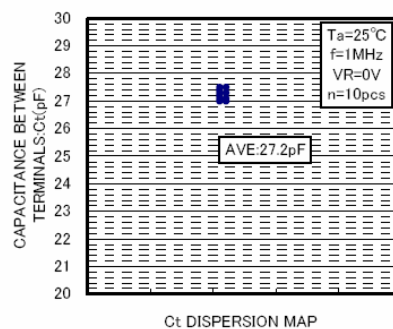
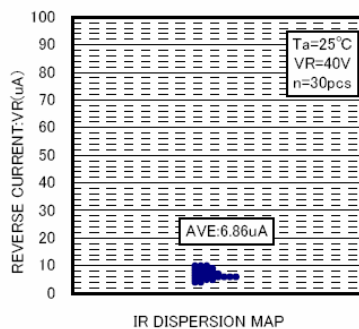
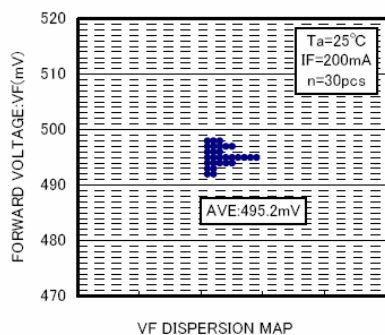
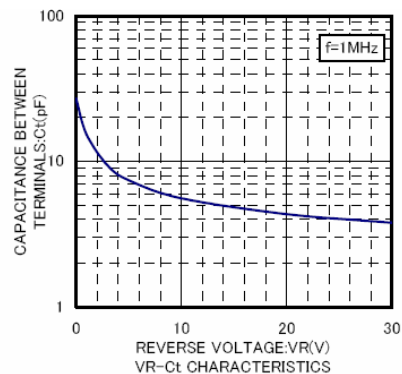
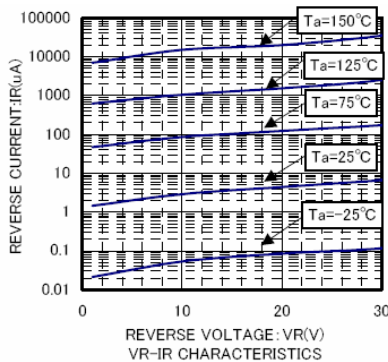
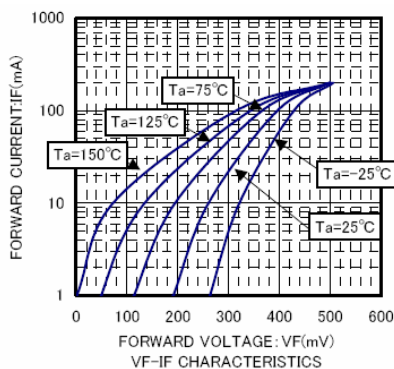
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ELECTRICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

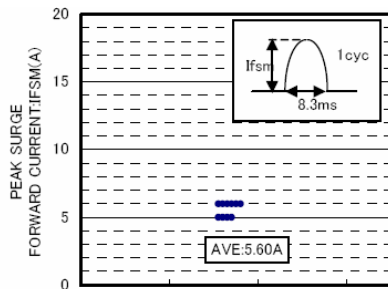
Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Forward voltage	V_F	0.16	0.26	0.33	V	$I_F=10\text{mA}$
		0.31	0.40	0.45	V	$I_F=100\text{mA}$
		0.41	0.50	0.54	V	$I_F=200\text{mA}$
Reverse current	I_R	-	2.50	20.00	μA	$V_R=10\text{V}$
		-	6.00	90.00	μA	$V_R=40\text{V}$
ESD break down voltage	ESD	10	-	-	KV	$C=100\text{PF}, R=1.5\text{K}\Omega$ Forward and reverse : 1 time

TYPICAL CHARACTERISTICS @ Ta=25°C unless otherwise specified

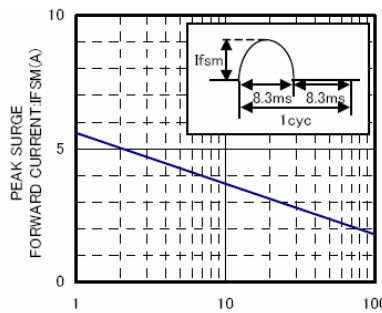


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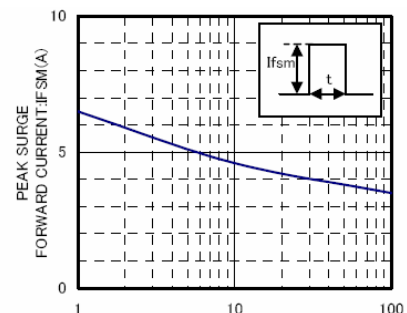
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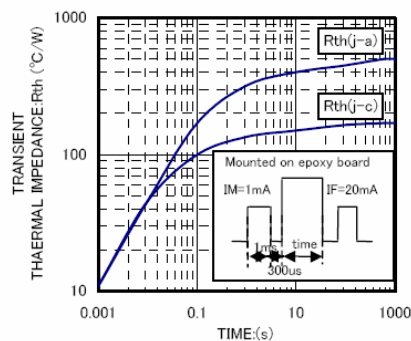
IFSM DISPERSION MAP



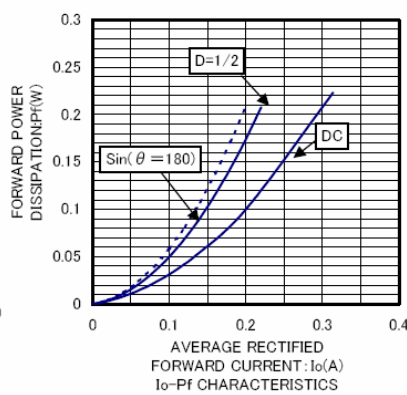
NUMBER OF CYCLES
IFSM-CYCLE CHARACTERISTICS



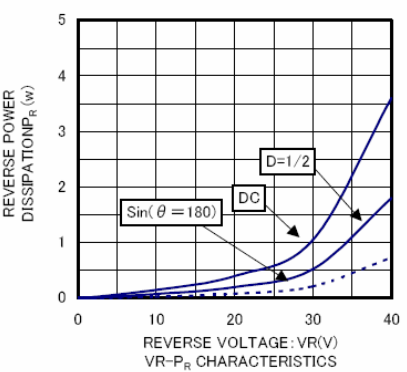
TIME: t (ms)
IFSM-t CHARACTERISTICS



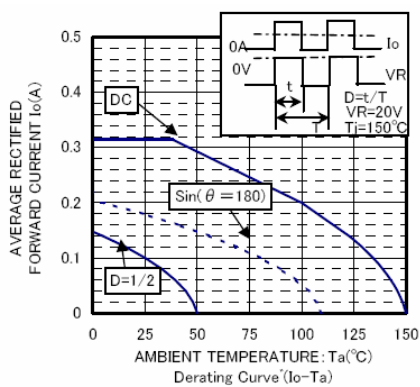
Rth-t CHARACTERISTICS



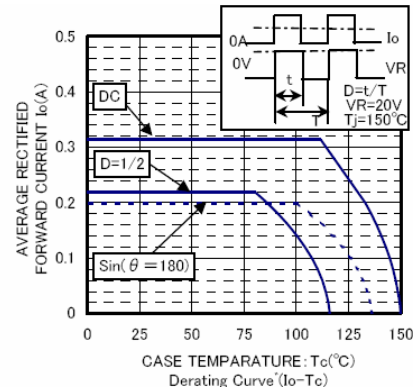
AVERAGE RECTIFIED
FORWARD CURRENT: I_o (A)
 I_o -P_F CHARACTERISTICS



REVERSE VOLTAGE: V_R (V)
 V_R -P_R CHARACTERISTICS



AMBIENT TEMPERATURE: T_a (°C)
Derating Curve (I_o - T_a)



CASE TEMPERATURE: T_c (°C)
Derating Curve (I_o - T_c)



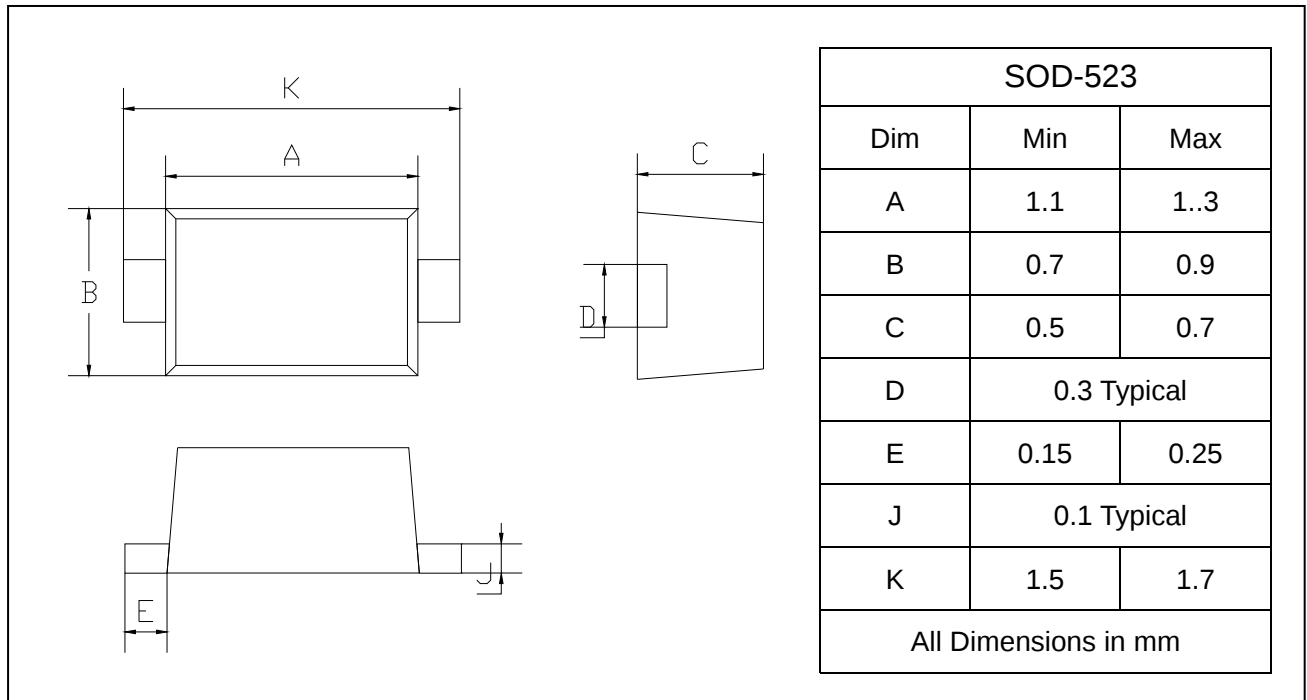
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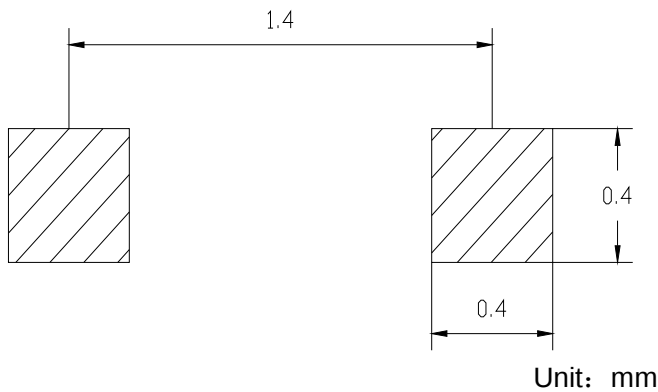
PACKAGE OUTLINE

Plastic surface mounted package

SOD-523



SOLDERING FOOTPRINT



PACKAGE INFORMATION

Device	Package	Shipping
RB521S-40	SOD-523	3000/Tape&Reel