

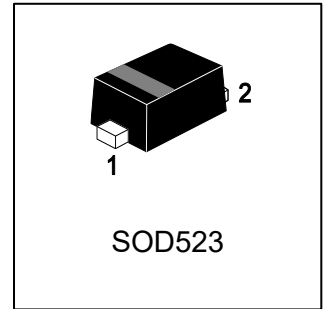
RB520S-30

S-RB520S-30

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 fast switching speed
- Extremely low forward voltage 0.6 V (max) @ $I_F = 200\text{mA}$
- Low reverse current



2. APPLICATIONS

- Low current rectification and high speed switching

3. DEVICE MARKING AND ORDERING INFORMATION

Device	Marking	Shipping
RB520S-30	5J	3000/Tape&Reel

4. MAXIMUM RATINGS ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Limit	Unit
DC reverse voltage	VR	30	V
Mean rectifying current	IO	200	mA
Peak forward surge current	IFSM	1	A

5. THERMAL CHARACTERISTICS

Parameter	Symbol	Limits	Unit
Total Device Dissipation, FR-5 Board (Note 1) @ $T_A = 25^\circ\text{C}$ Derate above 25°C	PD	200 2	mW mW/ $^\circ\text{C}$
Thermal Resistance, Junction-to-Ambient(Note 1)	R θ JA	500	$^\circ\text{C}/\text{W}$
Junction and Storage temperature	TJ, Tstg	-55~ +125	$^\circ\text{C}$

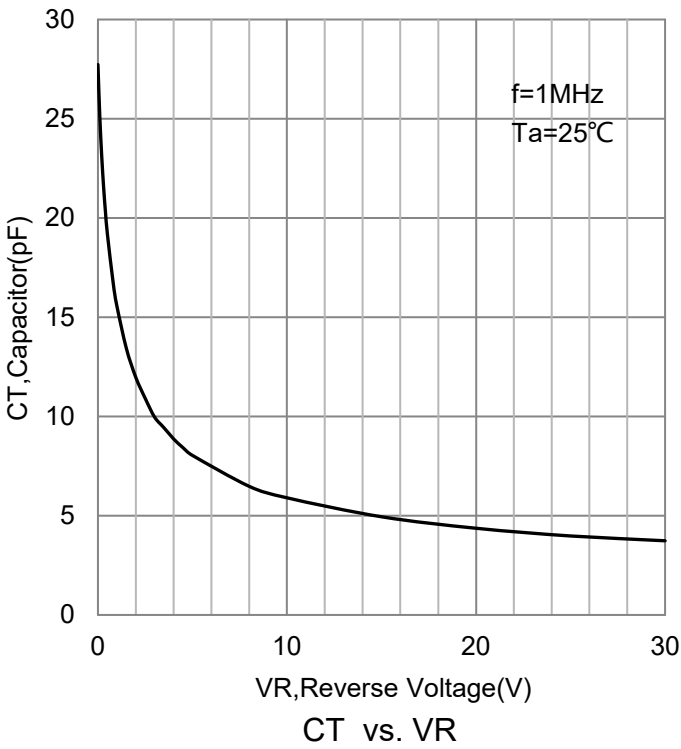
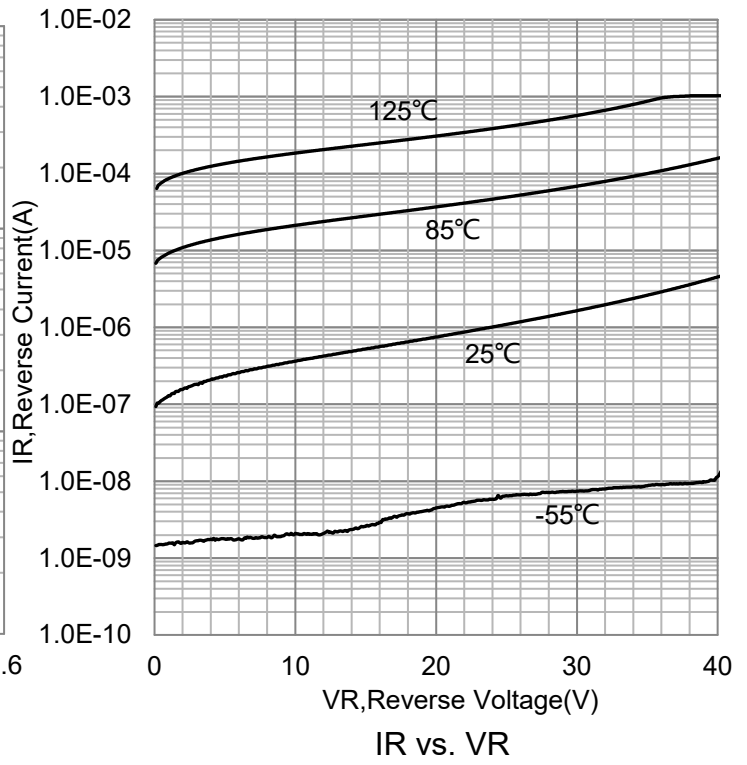
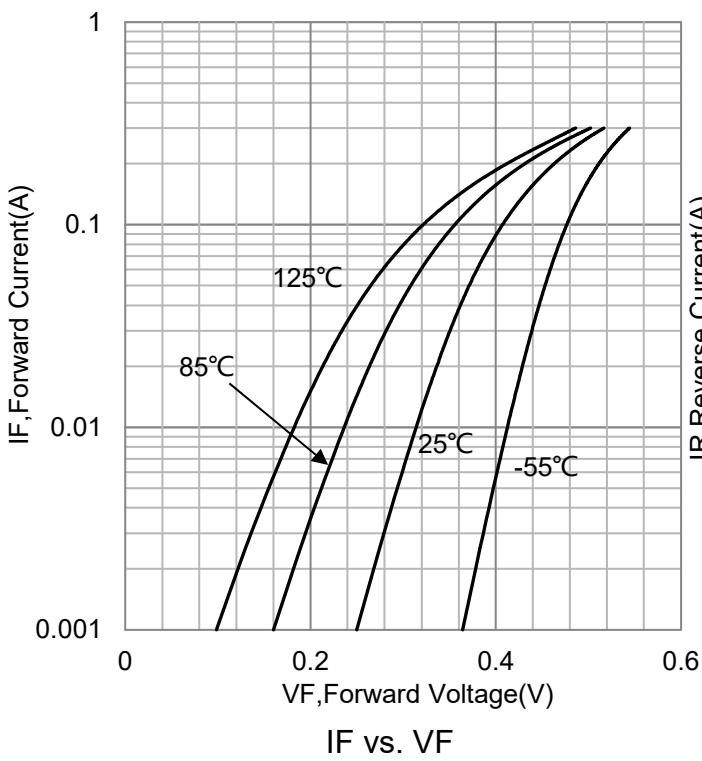
1. FR-5 = 1.0×0.75×0.062 in.

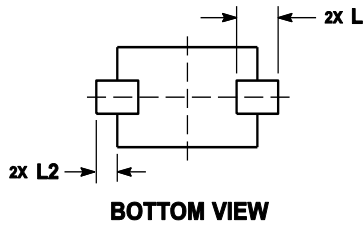
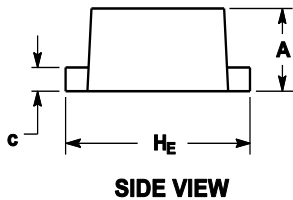
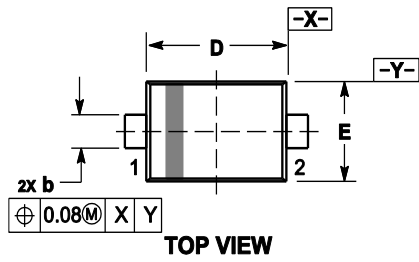
6. ELECTRICAL CHARACTERISTICS ($T_j = 25^\circ\text{C}$ unless otherwise specified.)

Parameter	Symbol	Min	Typ.	Max	Unit
Forward voltage ($I_F = 200\text{mA}$)	VF	-	-	0.6	V
Reverse current ($V_R = 10\text{V}$)	IR	-	-	1	μA



7.ELECTRICAL CHARACTERISTICS CURVES



8. OUTLINE AND DIMENSIONS

Notes:

1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.
2. CONTROLLING DIMENSION: MILLIMETERS.
3. MAXIMUM LEAD THICKNESS INCLUDES LEAD FINISH. MINIMUM LEAD THICKNESS IS THE MINIMUM THICKNESS OF BASE MATERIAL.
4. DIMENSIONS D AND E DO NOT INCLUDE MOLD FLASH, PROTRUSIONS OR GATE BURRS.

DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.50	0.60	0.70	0.020	0.024	0.028
b	0.25	0.30	0.35	0.010	0.012	0.014
c	0.07	0.14	0.20	0.003	0.006	0.008
D	1.10	1.20	1.30	0.043	0.047	0.051
E	0.70	0.80	0.90	0.028	0.031	0.035
H _E	1.50	1.60	1.70	0.059	0.063	0.067
L	0.30 REF			0.012 REF		
L ₂	0.15	0.20	0.25	0.006	0.008	0.010

9. SOLDERING FOOTPRINT
