

SOT-323 Plastic-Encapsulate Diode

RB706F-40 SCHOTTKY BARRIER DIODE

FEATURES:

Power dissipation

$$P_D : 200 \text{ mW}, T_{amb}=25 \text{ deg C}$$

Collector current

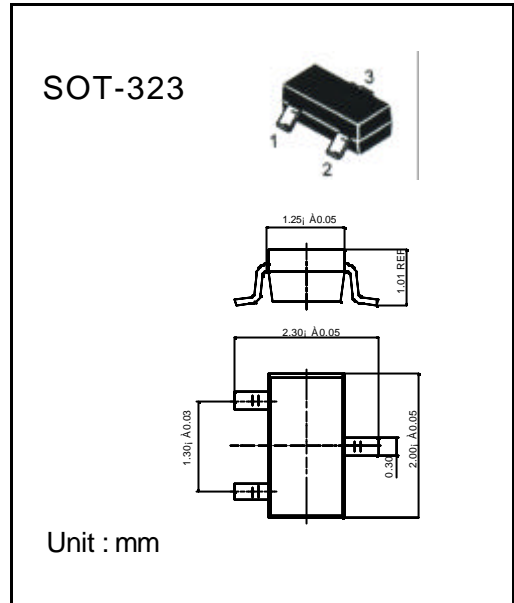
$$I_F : 30 \text{ mA}$$

Collector-base voltage

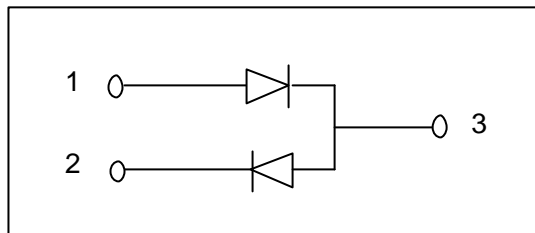
$$V_R : 40 \text{ V}$$

Operating and storage junction temperature range

$$T_J \text{ to } T_{stg} : -55 \text{ deg C to } +150 \text{ deg C}$$



CIRCUIT:



MARKING: 3J

ELECTRICAL CHARACTERISTICS $T_{amb}=25 \text{ deg C}$ unless otherwise specified

Parameter	Symbol	Test conditions	MIN	MAX	UNIT
Reverse breakdown voltage	$V_{(BR)}$	$I_R=100\mu A$	40		V
Reverse voltage leakage current	I_R	$V_R=10V$		1	μA
Forward voltage	V_F	$I_F=1mA$		0.37	V
Diode capacitance	C_D	$V_R=1V, f=1MHz$		5	pF

Typical Characteristics

RB706F-40

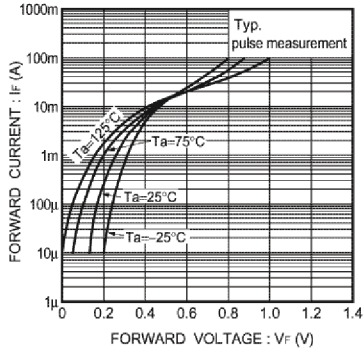


Fig. 1 Forward characteristics

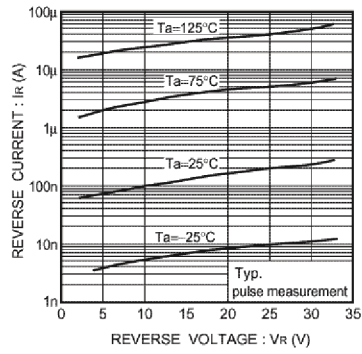


Fig. 2 Reverse characteristics

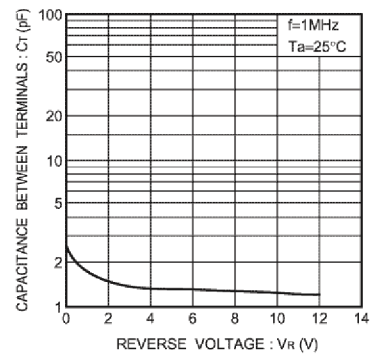


Fig. 3 Capacitance between terminals characteristics

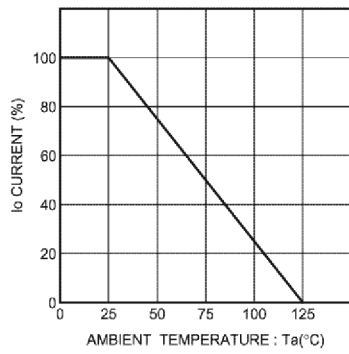
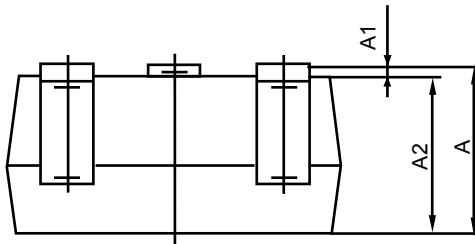
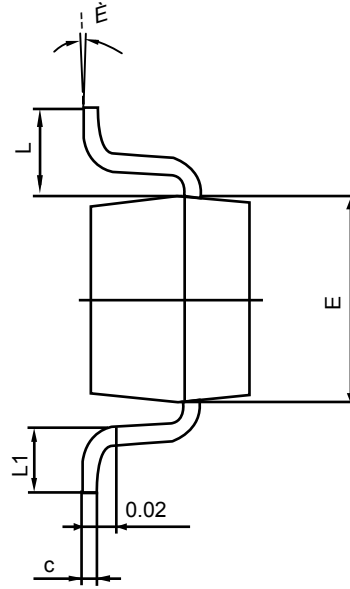
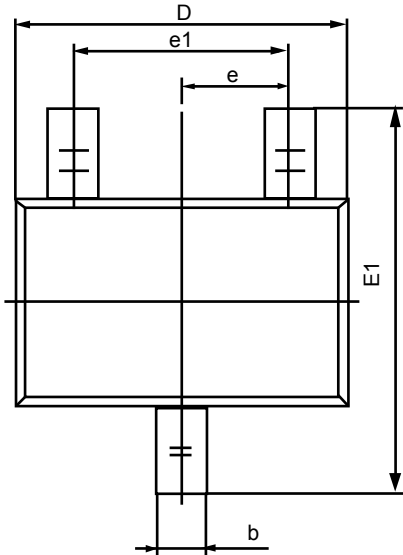


Fig. 4. Derating curve (mounting on glass epoxy PCBs)



SOT-323 PACKAGE OUTLINE DIMENSIONS



Symbol	Dimensions In Millimeters		Dimensions In Inches	
	Min	Max	Min	Max
A	0.900	1.100	0.035	0.043
A1	0.000	0.100	0.000	0.004
A2	0.900	1.000	0.035	0.039
b	0.200	0.400	0.008	0.016
c	0.080	0.150	0.003	0.006
D	2.000	2.200	0.079	0.087
E	1.150	1.350	0.045	0.053
E1	2.150	2.450	0.085	0.096
e	0.650TYP		0.026TYP	
e1	1.200	1.400	0.047	0.055
L	0.525REF		0.021REF	
L1	0.260	0.460	0.010	0.018
θ	0°	8°	0°	8°