TAYCHIPST

SURFACE MOUNT RECTIFIER

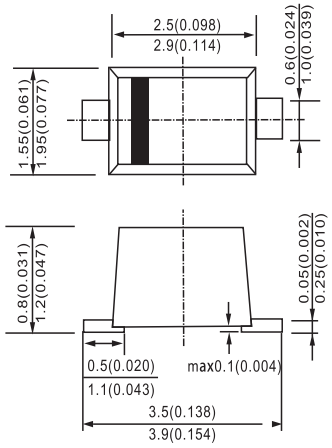
RS07B THRU RS07M

100V-1000V 0.7A

FEATURES

- For surface mounted applications
- Low profile package
- Ideal for automated placement
- Glass passivated
- High temperature soldering: 260 °C/ 10 s at terminals
- Wave and reflow solderable
- AEC-Q101 qualified
- Compliant to RoHS directive 2002/95/EC and in accordance to WEEE 2002/96/EC

SOD-123FL



Dimensions in millimeters

Mechanical Data

Case: DO-219AB (SOD-123FL)
Polarity: band denotes cathode end
Weight: approx. 15 mg

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
Single hase,half wave,60Hz,resistive or inductive load.For capactive load,derate current by 20%.

		RS07B	RS07D	RS07G	RS07J	RS07K	RS07M	UNITS
Device marking code		RB	RD	RG	RJ	RK	RM	
Maximum recurrent peak reverse voltage	V_{RRM}	100	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	70	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	100	200	400	600	800	1000	V
Maximum average forword rectified current T_A=65°C (NOTE 1)	$I_{(AV)}$	0.7						A
Peak forward surge current 8.3ms single half-sine-wave superimposed on rated load T_L=25°C	I_{FSM}	20						A
Typical thermal resistance (NOTE 2)	$R_{j\theta A}$	180						K/W
Maximum reverse recovery time (NOTE 3)	t_{rr}	150			250	500		ns
Operating temperature range	T_j	- 55 --- + 150						°C
Storage temperature range	T_{STG}	- 55 --- + 150						°C

NOTES:1.Averaged over any 20 ms period.

2. Thermal resistance junction to ambient, 6.0 mm^2 coppeer pads to each terminal.

3.Measured with I_F=0.5A, I_R=1A, I_{rr}=0.25A.

RATINGS AND CHARACTERISTIC CURVES RS07B THRU RS07M

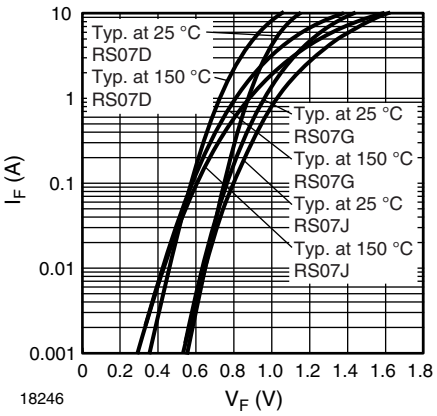


Figure 1. Typical Forward Characteristics

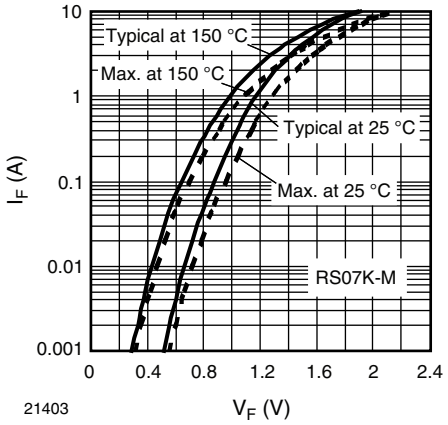


Figure 2. Typical Forward Characteristics

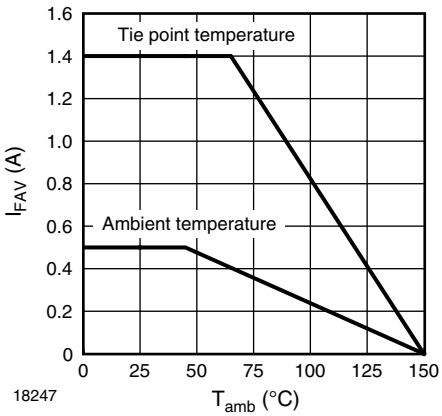


Figure 3. Forward Current Derating Curve

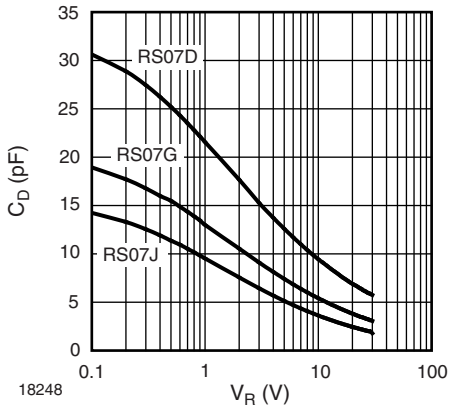


Figure 4. Typ. Diode Capacitance vs. Reverse Voltage

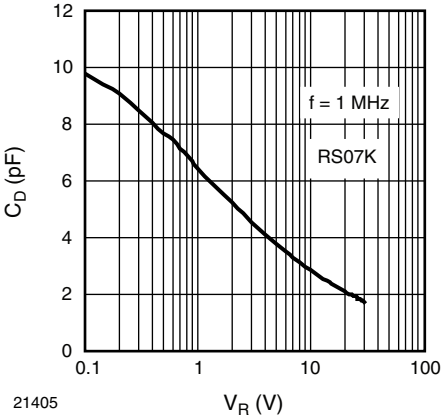


Figure 5. Typ. Diode Capacitance vs. Reverse Voltage

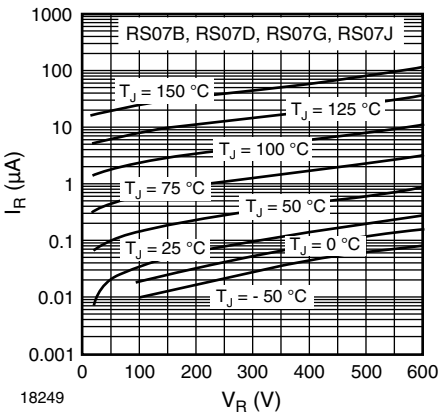


Figure 6. Typical Reverse Characteristics