

**SURFACEMOUNT RECTIFIERS****RS07B--RS07M****FEATURES**

- Glass passivated devicens
- Ideal for surface mounted applications
- Low leakage current
- Metallurgically bonded construction
- High temperature soldering: 260°C/10 seconds at terminals

**MECHANICAL DATA**

- Case: JEDEC SOD-123FL, molded plastic over passivated chip
- Terminals: Solder Plated, solderable perMIL-STD-750, Method 2026
- Polarity: Color band denotes cathode end
- Weight: 0.0008 ounces, 0.022 gram

**Maximum Ratings** (@TA = 25°C unless otherwise specified)

Characteristic	Symbol	RS07B	RS07D	RS07G	RS07J	RS07K	RS07M	UNITS
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 forward rectified current $T_A=65^\circ\text{C}$ (NOTE1)	$I_{(AV)}$	0.7						A
Peak forward surge current 8.3ms single half-sine-wave super imposed on rated load $T_L=25^\circ\text{C}$	$I_{FSM}$	30						A

**Thermal Characteristics**

Characteristic	Symbol	RS07B	RS07D	RS07G	RS07J	RS07K	RS07M	UNITS
Typical junction capacitance (NOTE 2)	$C_J$	7.5						p F
Typical thermal resistance	$R_{\theta JA}$	180						K/W
Maximum reverse recovery time (NOTE3)	$t_{rr}$	150			250	500		ns
Operating temperature range	$T_J T_{STG}$	- 55 --- + 150						°C

**Electrical Characteristics** (@TA = 25°C unless otherwise specified)

Characteristic	Symbol	RS07B	RS07D	RS07G	RS07J	RS07K	RS07M	UNITS
Maximum instantaneous forward voltage at 0.7A	$V_F$	1.15						V
Maximum DC reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=125^\circ\text{C}$	$I_R$				10			$\mu$ A
					50			

NOTES: 1. Averaged over any 20 ms period.

2. Measured at 1.0MHz and applied average voltage of 4.0V DC.

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



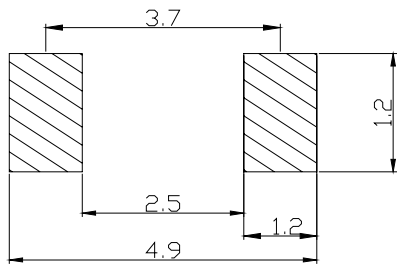
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**RS07B--RS07M**

**PACKAGE OUTLINE DIMENSIONS**

SOD-123FL		
Dim	Min	Max
A	2.60	3.00
B	1.70	2.10
D	3.45	3.95
E	0.10	0.30
F	0.30	0.90
H	1.05	1.35
I	0.85	1.15
All Dimensions in mm		

**SOLDERING FOOTPRINT**



Unit : mm

**PACKAGE INFORMATION**

Device	Package	Shipping
RS07B--RS07M	SOD-123FL	10000/Tape&Reel



# SURFACEMOUNT RECTIFIERS

# RS07B--RS07M

FIG.1 – TYPICAL FORWARD CHARACTERISTIC

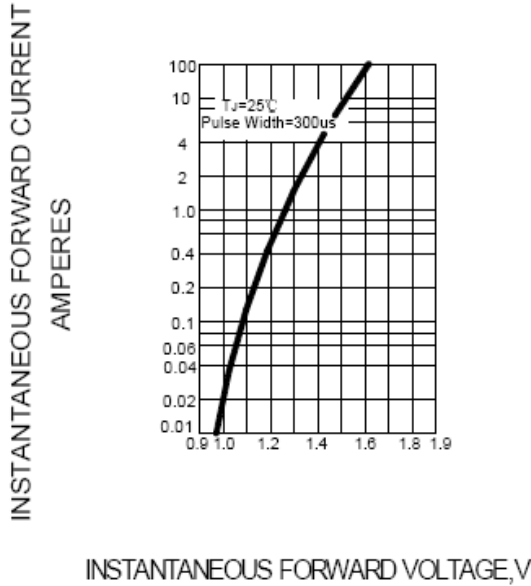


FIG.2 – TYPICAL JUNCTION CAPACITANCE

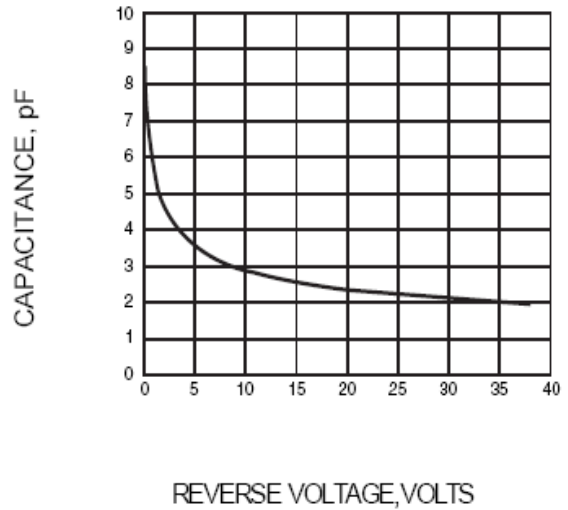


FIG.3 – TYPICAL INSTANTANEOUS REVERSE CHARACTERISTICS

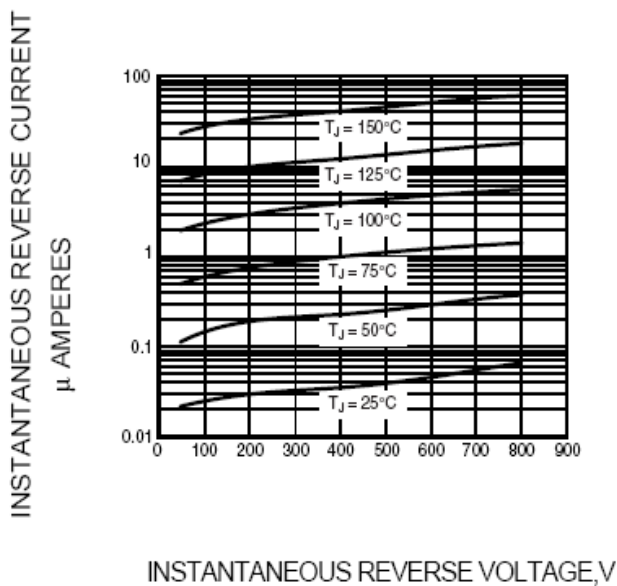


FIG.4 – FORWARD DERATING CURVE

