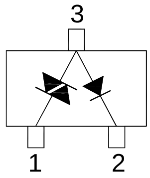
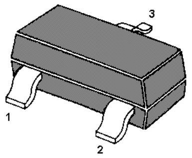
DB307AC

Silicon Rectifier and Trigger Composited Diodes





Marking Code: **R7D3**
SOT-23 Plastic Package

Absolute Maximum Ratings (T_a = 25 °C)

Parameter	Symbol	Value	Unit
Non-repetitive Peak Reverse Voltage for Rectifier	V_{RSM}	800	V
Repetitive Peak Reverse Voltage for Rectifier	V_{RRM}	800	V
Non-repetitive Peak Forward Surge Current (8.3 ms) for Rectifier	I_{FSM}	4	A
Repetitive Peak On-state Current (tp = 20 µs, f = 100 Hz) for Trigger Diodes	I_{TRM}	2	A
Average Rectified Forward Current for Rectifier	$I_{F(AV)}$	200	mA
Operating Junction and Storage Temperature Range	T_j, T_{stg}	- 40 to + 125	°C

Characteristics for Trigger Diodes at T_a = 25 °C

Parameter	Symbol	Min.	Max.	Unit
Breakover Voltage at C = 22 nF	V_{BO}	28	36	V
Dynamic Breakover Voltage at ΔI = [I_{BO} to I_F = 10 mA]	ΔV	5	-	V
Breakover Current at C = 22 nF	I_{BO}	-	10	µA
Leakage Current at V_B = 16 V	I_B	-	1	µA

Characteristics for Rectifier at T_a = 25 °C

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at I_R = 100 µA	$V_{(BR)R}$	800	-	V
Forward Voltage at I_F = 200 mA	V_F	-	1.2	V
Reverse Current at V_R = 600 V	I_R	-	5	µA

SEMTECH