

SOT-143

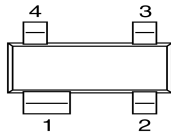
Features and benefits

- * High switching speed: trr 4 ns
- * Reverse voltage: VR 75 V
- * Repetitive peak reverse voltage: VRRM 85 V
- * Repetitive peak forward current: IFRM 500 mA
- * mall SMD package

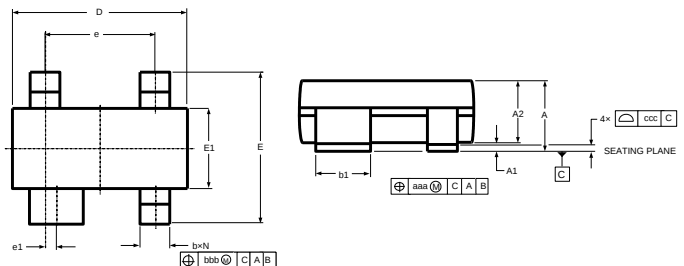
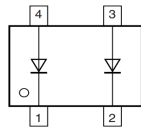
Applications

- * High-speed switching in e.g. surface-mounted circuits

Marking : JTW



SOT143



DIMENSIONS				
SYMBOL	MILLIMETER		INCHES	
	MIN	MAX	MIN	MAX
A	0.900	1.150	0.035	0.045
A1	0.000	0.100	0.000	0.004
A2	0.900	1.050	0.035	0.041
b	0.300	0.500	0.012	0.020
b1	0.750	0.900	0.030	0.035
D	2.800	3.000	0.110	0.118
e	1.800	2.000	0.071	0.079
e1	0.200TYP		0.008TYP	
E	2.250	2.550	0.089	0.100
E1	1.200	1.400	0.047	0.055
θ	0°	8°	0°	8°
aaa	.006		0.15	
bbb	.008		0.20	
ccc	.004		0.10	

Dimensions in inches and (millimeters)

Absolute Maximum Ratings (Ta = 25 °C)

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V _{RM}	100	V
Reverse Voltage	V _R	80	V
Average Rectified Forward Current	I _{F(AV)}	215	mA
Forward Continuous Current	I _{FM}	500	mA
Non-Repetitive Peak Forward Surge Current (at t = 1 μs)	I _{FSM}	4	A
Power Dissipation	P _d	400	mW
Junction Temperature	T _j	150	°C
Storage Temperature Range	T _{stg}	- 65 to + 150	°C

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Characteristics at $T_a = 25\text{ }^{\circ}\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Forward Voltage at $I_F = 5\text{ mA}$ at $I_F = 10\text{ mA}$ at $I_F = 100\text{ mA}$ at $I_F = 150\text{ mA}$	V_F	0.62 - - -	0.72 0.855 1 1.25	V
Reverse Leakage Current at $V_R = 80\text{ V}$ at $V_R = 20\text{ V}$ at $V_R = 75\text{ V}$, $T_J = 150\text{ }^{\circ}\text{C}$ at $V_R = 25\text{ V}$, $T_J = 150\text{ }^{\circ}\text{C}$	I_R	- - - -	1000 30 50 30	nA nA μA μA
Reverse Breakdown Voltage at $I_R = 100\text{ }\mu\text{A}$	$V_{(BR)R}$	80	-	V
Total Capacitance at $V_R = 0.5\text{ V}$, $f = 1\text{ MHz}$	C_{tot}	-	4	pF
Reverse Recovery Time at $I_F = I_R = 10\text{ mA}$, $I_{rr} = 0.1 \times I_R$, $R_L = 100\text{ }\Omega$	t_{rr}	-	4	ns

RATING AND CHARACTERISTIC CURVES (BAS28)

