

BAT54WT THRU BAT54SWT

Parameter	Symbol	Unit	Value
Junction temperature	T_J	$^{\circ}\text{C}$	-55 to +125
Storage temperature	T_{STG}	$^{\circ}\text{C}$	-55 to +125

■ Electrical Characteristics ($T_a=25^{\circ}\text{C}$ Unless otherwise specified)

Parameter	Symbol	UNIT	Conditions	Min	Typ	Max
Reverse voltage	V_R	V	$I_R=0.1\text{mA}$	30		
Forward voltage	V_{F1}	V	$I_F=0.1\text{mA}$			0.24
	V_{F2}	V	$I_F=1\text{mA}$			0.32
	V_{F3}	V	$I_F=10\text{mA}$			0.4
	V_{F4}	V	$I_F=30\text{mA}$			0.5
	V_{F5}	V	$I_F=100\text{mA}$			1
Reverse leakage current	I_R	μA	$V_R=25\text{V}$			2
Junction capacitance	C_j	pF	$V_R=1.0\text{V}, f=1\text{MHz}$		10	
Reverse recovery time	T_{rr}	ns	$I_F=I_R=10\text{mA}$, $I_{rr}=0.1 \cdot I_R, R_L=100\Omega$			5

■ Thermal Characteristics

Parameter	Symbol	Unit	Value
Thermal resistance, junction-to-ambient	$R_{\theta J-A}^{(1)}$	$^{\circ}\text{C/W}$	500
Thermal resistance, junction-to-case	$R_{\theta J-C}^{(1)}$	$^{\circ}\text{C/W}$	400

Note:

(1) Device mounted on PCB, single-sided copper, with standard footprint

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■ Characteristics

Fig 1: P_D - T_a Curve

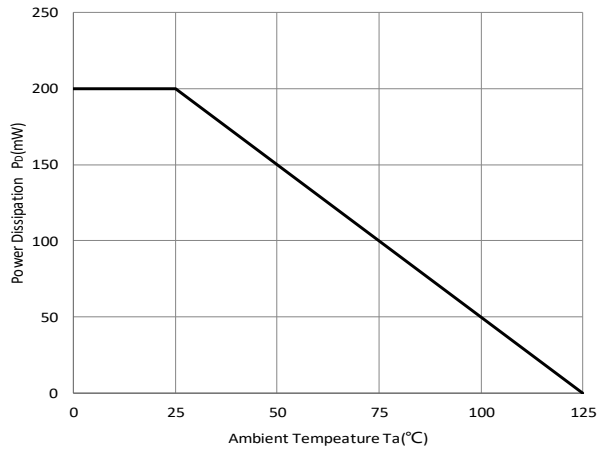


Fig 2: Capacitance Capability

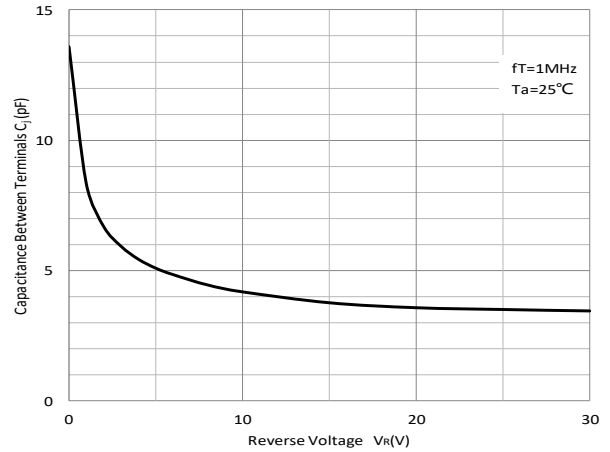


Fig 3: Typical Forward Characteristics

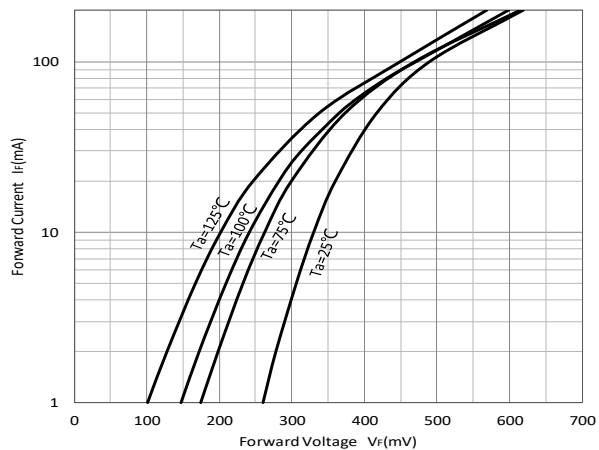
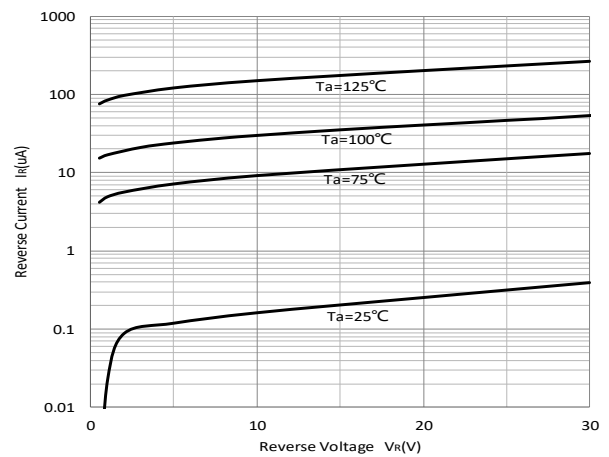


Fig 4: Typical Reverse Characteristics

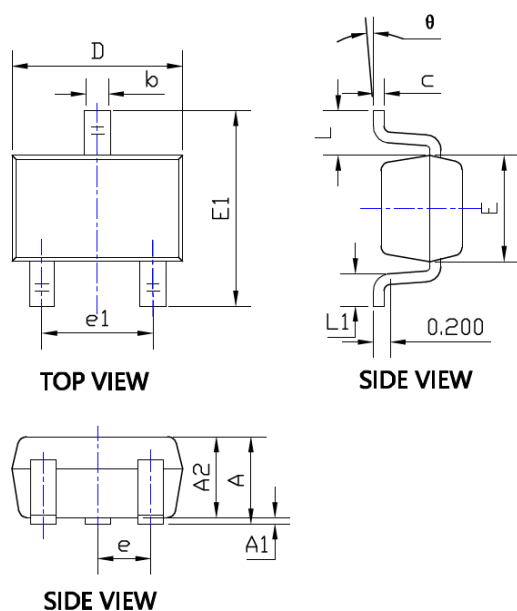


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■ Ordering Information

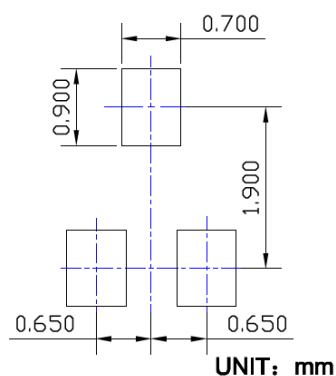
Preferred P/N	Packing code	Unit weight(g)	Minimum package(pcs)	Inner box quantity(pcs)	Outer carton quantity (pcs)	Delivery mode
BAT54WT THRU BAT54SWT	F2	Approximate 0.005	3000	30000	120000	7" reel

■ Outline Dimensions



SYMBOL	DIMENSIONS			
	INCHES		Millimeter	
	MIN.	MAX.	MIN.	MAX.
A	0.035	0.043	0.900	1.100
A1	0.000	0.004	0.000	0.100
A2	0.035	0.039	0.900	1.000
b	0.006	0.016	0.150	0.400
c	0.004	0.010	0.100	0.250
D	0.071	0.087	1.800	2.200
E	0.045	0.053	1.150	1.350
E1	0.085	0.096	2.150	2.450
e	0.026 TYP		0.650 TYP	
e1	0.047	0.055	1.200	1.400
L	0.021 REF		0.525 REF	
L1	0.010	0.018	0.260	0.460
θ	0°	8°	0°	8°

■ Suggested Pad Layout



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