

Features

- Electrically insulated high-voltage medium-speed diodes

Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Value	Unit
Reverse voltage	V_R	300	V
Peak reverse voltage	V_{RM}	300	V
Forward current	I_F	250	mA
Peak forward current	I_{FM}	500	mA
Surge forward current, $t = 1 \mu\text{s}$	I_{FS}	4.5	A
Total power dissipation, $T_s \leq 35^\circ\text{C}$	P_{tot}	350	mW
Junction temperature	T_j	150	$^\circ\text{C}$
Storage temperature range	T_{stg}	-65 to +150	$^\circ\text{C}$
Junction - ambient ⁽¹⁾	$R_{th JA}$	≤ 470	K/W
Junction - soldering point	$R_{th JS}$	≤ 330	K/W

Note

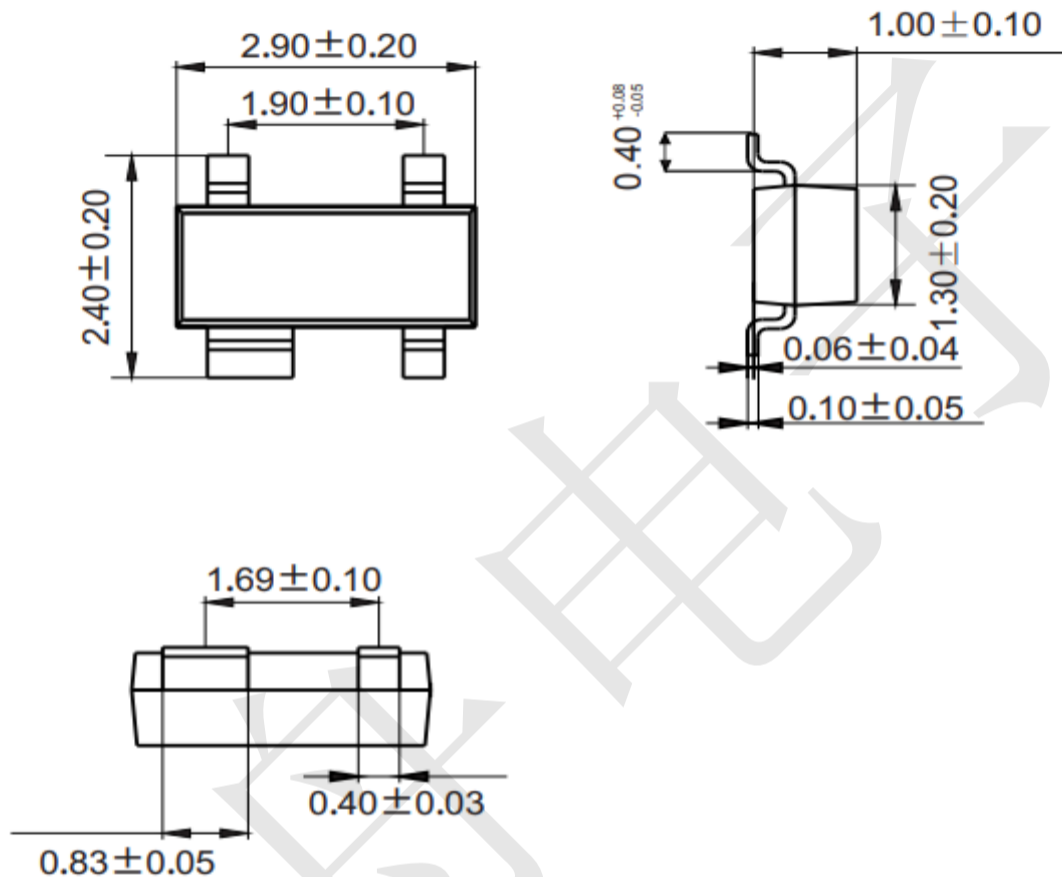
1. Package mounted on epoxy pcb $40 \text{ mm} \times 40 \text{ mm} \times 1.5 \text{ mm} / 6 \text{ cm}^2 \text{ Cu}$

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

Parameter	Symbol	Conditions	Min	Typ	Max	Unit
Breakdown voltage	V_{BR}	$I_{(BR)} = 100 \mu\text{A}$	300			V
Forward voltage	V_F	$I_F = 100 \text{ mA}$			1.3	V
Reverse current	I_R	$V_R = 250 \text{ V}$			150	nA
		$V_R = 250 \text{ V}, T_A = 150^\circ\text{C}$			50	μA
Diode capacitance	C_d	$V_R = 0 \text{ V}, f = 1 \text{ MHz}$		6		pF
Reverse recovery time	t_{rr}	$I_F = 10 \text{ mA}, I_R = 10 \text{ mA}, R_L = 100 \Omega$ measured at $I_R = 1 \text{ mA}$		1		Ω

Package information (Unit: mm)

SOT-143



Mounting Pad Layout (Unit: mm)

