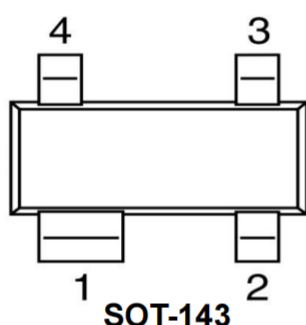


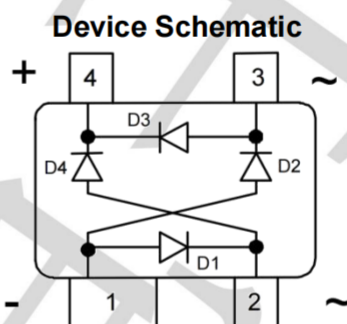
### Features

- Reverse voltage:40 V
- Forward current:0.2 A
- Fast Switching
- Low Leakage Current
- RoHs Product



### Applications

- Surface mount schottky barrier rectifier
- Buck and Boost dc-dc Converters
- Low Voltage High Frequency Switching Power Supply
- Low Voltage High Frequency Invers Circuit
- Low Voltage Continued Circuit and Protection Circuit



### Absolute Maximum Ratings (TA=25°C unless otherwise specified)

Parameter	Symbol	Value	Unit
Peak reverse voltage	V <sub>RM</sub>	40	V
Diode reverse voltage	V <sub>R</sub>	40	V
RMS reverse voltage	V <sub>R(RMS)</sub>	28	V
Maximum average forward rectified current	I <sub>F(AV)</sub>	200	mA
Non-repetitive Peak Forward Surge Current@t=10ms	I <sub>FSM</sub>	2	A
Power Dissipation	P <sub>d</sub>	400	mW
Thermal Resistance Junction to Ambient	R <sub>θJA</sub>	312	°C/W
Operating Junction Temperature Range	T <sub>J</sub>	-55 to +150	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150	°C

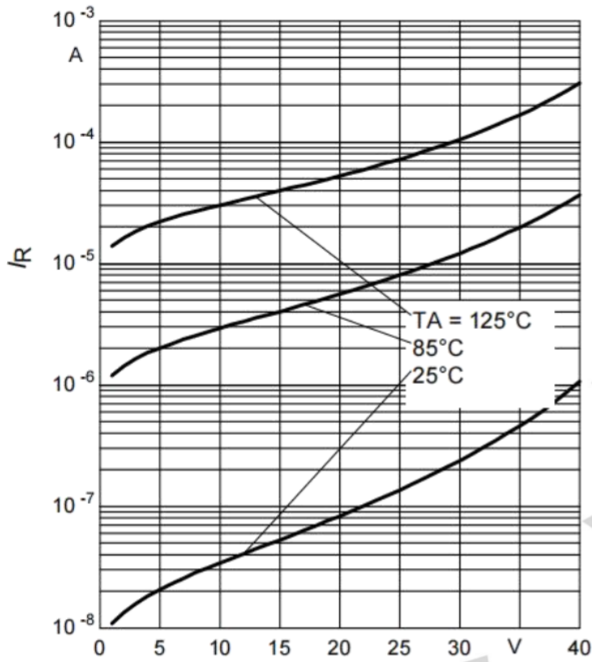
### Electrical Characteristics (TA=25°C unless otherwise specified)

Parameter	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse breakdown voltage	V (BR)	40	--	--	V	I <sub>R</sub> =100μA
Forward Voltage	VF	--	--	0.44	V	I <sub>F</sub> =10mA
		--	--	0.55	V	I <sub>F</sub> =60mA
		--	--	0.62	V	I <sub>F</sub> =100mA
		--	--	0.79	V	I <sub>F</sub> =200mA
Reverse Leakage	I <sub>R</sub>	--	10	30	uA	V <sub>R</sub> =40V
Capacitance terminals	C <sub>T</sub>	--	--	5.0	pF	V <sub>R</sub> = 5 V, f = 1 MHz

### Typical Electrical Characteristic Curves

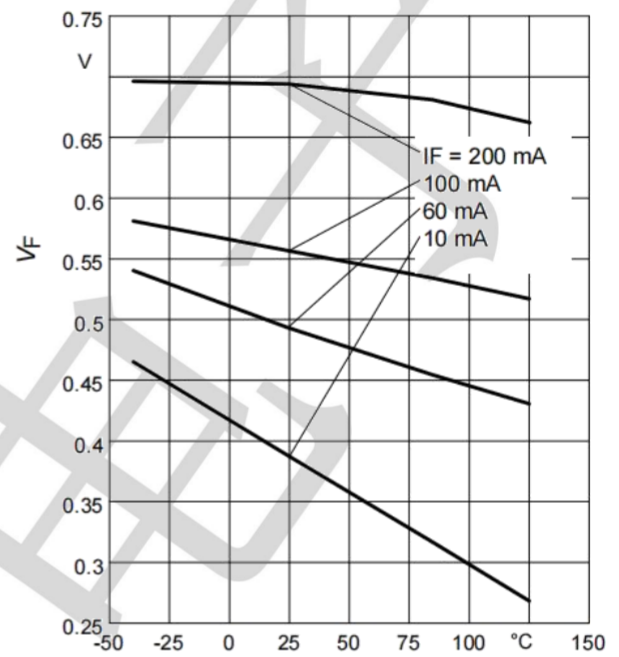
**Reverse current  $I_R = f(V_R)$**

$T_A = \text{Parameter (per diode)}$



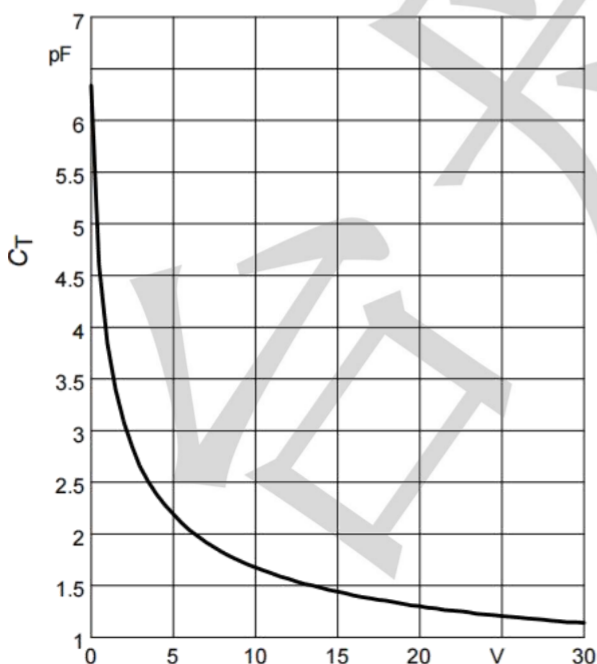
**Forward Voltage  $V_F = f(T_A)$**

$I_F = \text{Parameter (per diode)}$



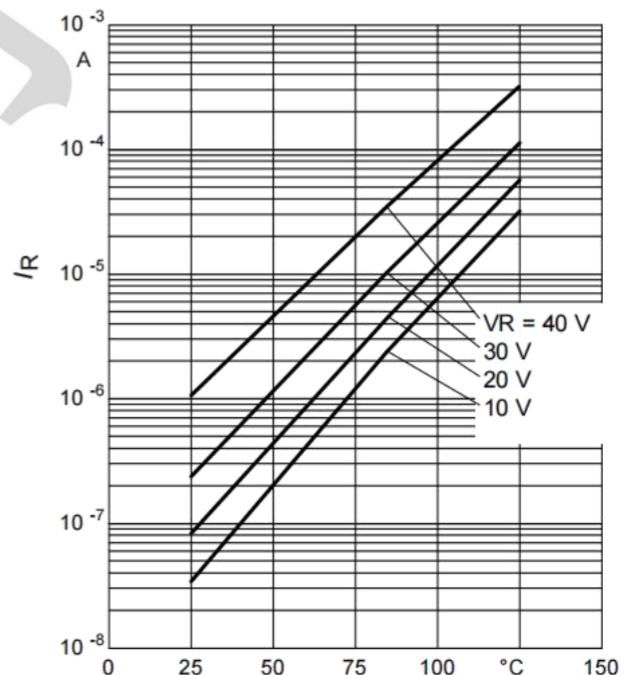
**Diode capacitance  $C_T = f(V_R)$**

$f = 1\text{MHz (per diode)}$



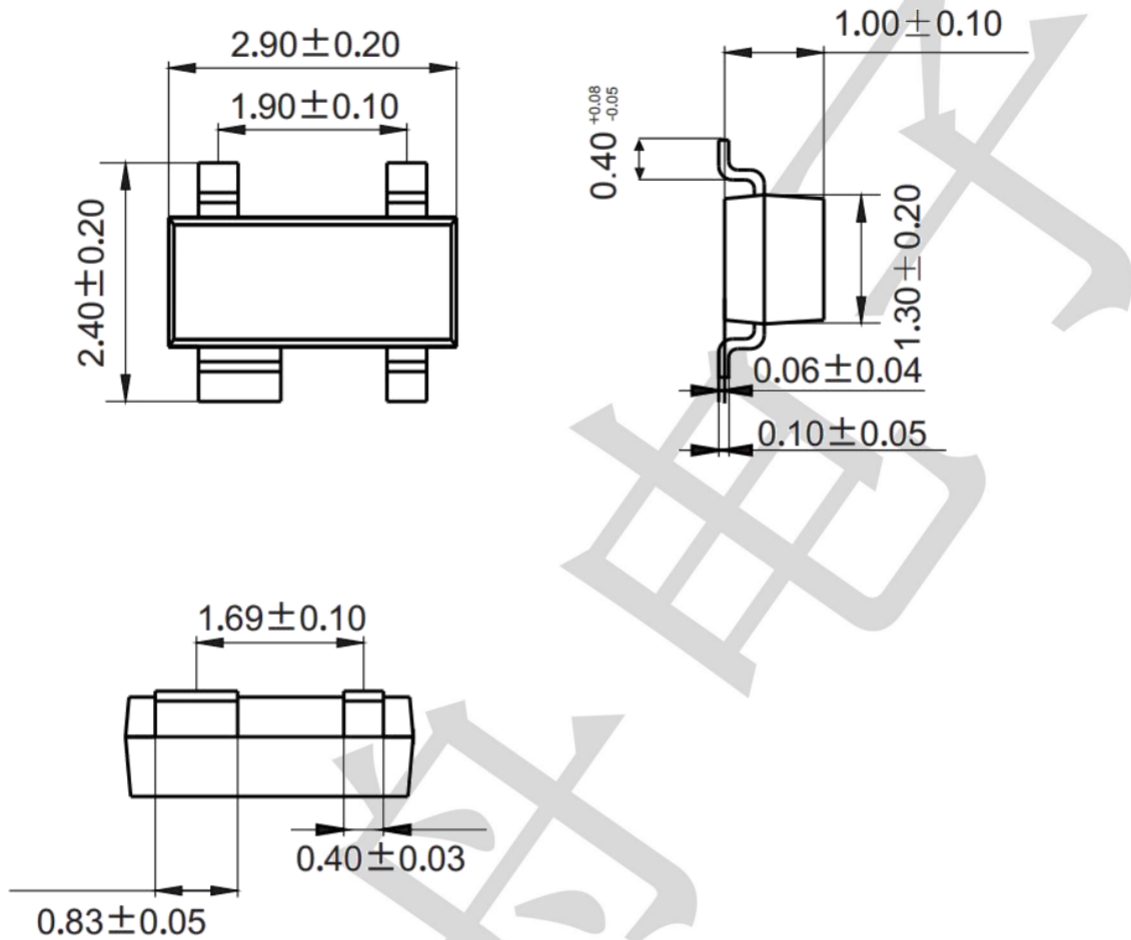
**Reverse current  $I_R = f(T_A)$**

$V_R = \text{Parameter (per diode)}$



### Package Outline Dimensions (unit: mm)

SOT-143



### Mounting Pad Layout (unit: mm)

