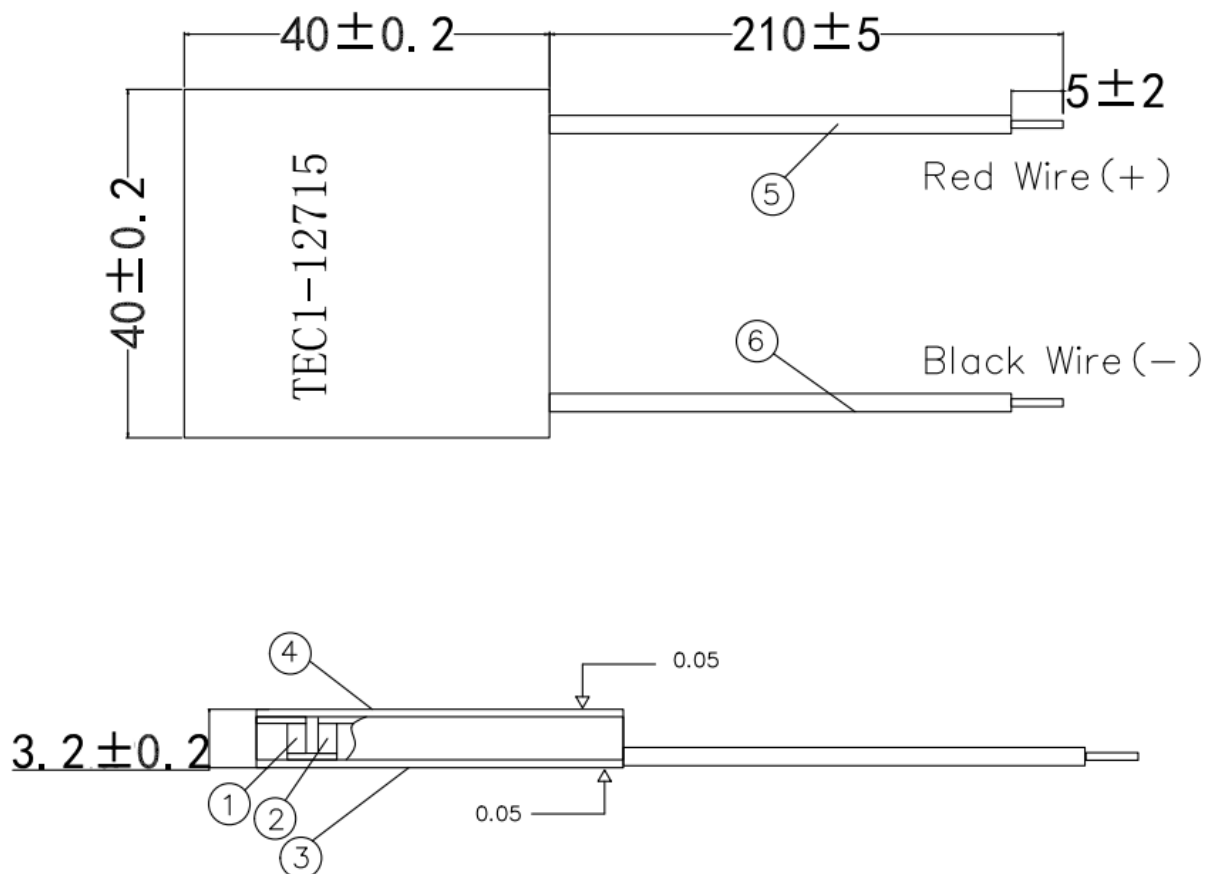


## TEC1-12715

Performance parameter:

item	value	Test condition
最大电流 $I_{max}$ (A)	15	$Q_c=0, DT=Dt_{max}, Th=31^{\circ}C$
最大电压 $V_{max}$ (V)	15.8	$Q_c=0, DT=Dt_{max}, Th=31^{\circ}C$
最大吸热量 $Q_{cmax}$ (W)	130	$I=I_{max}, Dt=0, Th=31^{\circ}C$
最大温差 $DT_{max}$	$65^{\circ}C$	$Q_c=0, I=I_{max}, Th=31^{\circ}C$
电阻 $R$ ( $\Omega$ )	0.7-0.9	$T_a=25^{\circ}C$

Product drawing



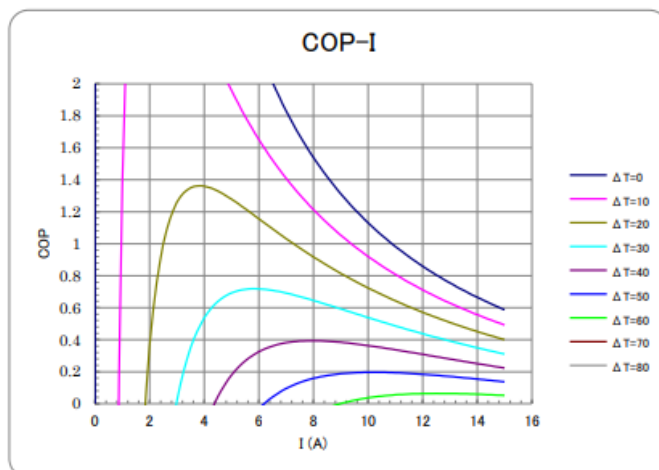
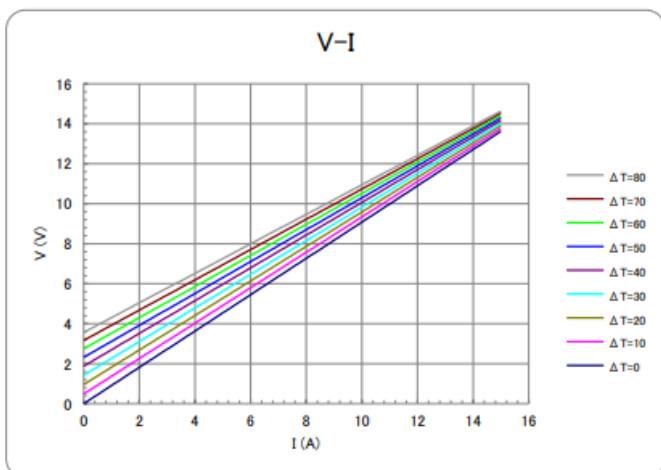
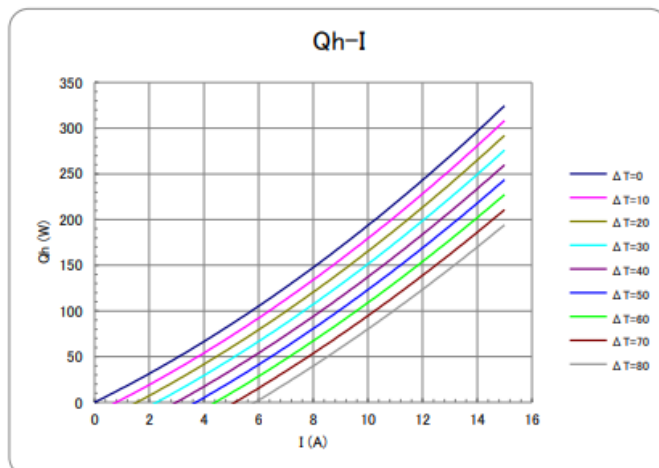
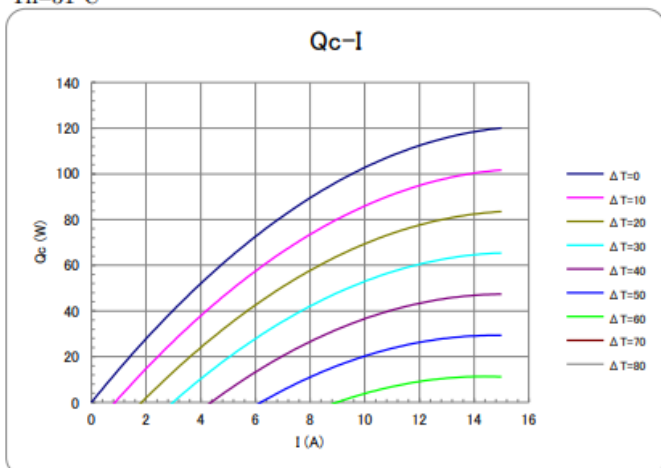
Other parameters

1. The number of product particles is 127 pairs; The melting point of solder is 138 .
2. Wire: UL3132#20 silicone wire, temperature resistance 150 ; Meet REACH and ROHS environmental requirements. Wire ends on tin.
3. Hot and cold surface: red line through the positive electrode, printing position for the cold surface.

4. Sealing adhesive: RTV adhesive.
5. Recommended operating temperature range:  $-40\sim 65^{\circ}\text{C}$ .
6. The tensile strength standard of wire welding is: static parallel tension 2Kg, keep for 1 minute, no bad phenomenon such as broken wire.
7. The resistance test adopts AC high-frequency milliohm meter or handheld LCR digital bridge (TH2822 series), and the resistance value cannot be tested with a multimeter. Resistance value will change with the change of temperature, the ambient temperature increases or decreases by  $1^{\circ}\text{C}$ , the resistance value increases or decreases by 5 %.
8. The cold and hot exchange should wait for the temperature of the hot and cold surface to return to room temperature (generally recommended for more than 15 minutes), otherwise it is easy to cause damage to the semiconductor cooler.

## Performance graph

$T_h=31^{\circ}\text{C}$



$T_h$ : Temperature of heat radiating side

$Q_c$ : Heat absorbed (pumped)

$I$ : Input current

$\Delta T$ : Temperature difference between heat radiating side and heat absorbing side

$V$ : Input voltage

$Q_h$ : Heat radiated

$COP$ : Coefficient of performance

In air