

Product Character

- Multilayer Metal-Silicon Potential Structure.
- Low Leakage Current.
- High Current Capability, High Efficiency.
- High Junction Temperature Capability.
- RoHS Product.

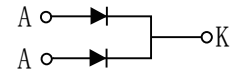
Summarize

● SR10100CS Device optimized for ultra-low forward voltage drop to maximize efficiency in Power Supply applications.

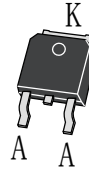
Primary Use

- Low Voltage High Frequency Switching Power Supply.
- Low Voltage High Frequency Inverter Circuit.
- Low Voltage Continued Circuit and Protection Circuit.

Equivalent Circuit



T0 -252 -2L



Absolute Maximum Ratings

Item	Symbol	Data	Unit
Maximal Inverted Repetitive Peak Voltage	V_{RRM}	100	V
*Average Rectified Forward Current (Rated VR - 20Khz Square Wave) - 50% duty cycle	I_{FAV}	10	A
Forward Peak Surge Current (Rated Load 8.3 Half Mssine Wave - According to JEDEC Method)	I_{FSM}	190×2	A
Operating Junction Temperature	T_J	150	°C
Storage Temperature	T_{STG}	-40 ~ 150	°C
Typical Thermal Resistance (per leg) Package=T0 -252 -2L	$R_{\theta JC}$	3	°C/W

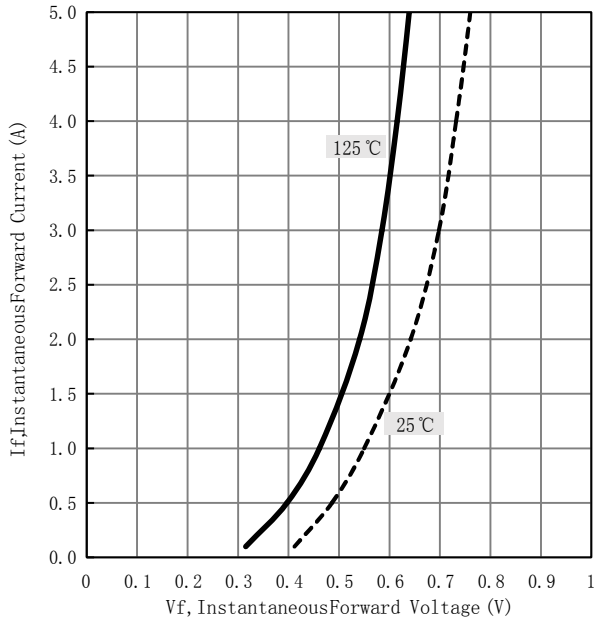
Electricity Character

Item	Test Condition		Value (min)	Value (typ)	Value (max)	Unit
V_B	$T_J = 25\text{ °C}$	$I_R = 1\text{mA}$	100	---	---	V
I_R	$T_J = 25\text{ °C}$	$V_R = 100\text{V}$	---	---	0.05	mA
	$T_J = 125\text{ °C}$	$V_R = 100\text{V}$	---	---	10.00	mA
V_F	$T_J = 25\text{ °C}$	$I_F = 5\text{A}$ ($I_{FAV} = 5\text{A} \times 2$)	---	0.76	0.83	V
	$T_J = 125\text{ °C}$		---	---	0.72	V

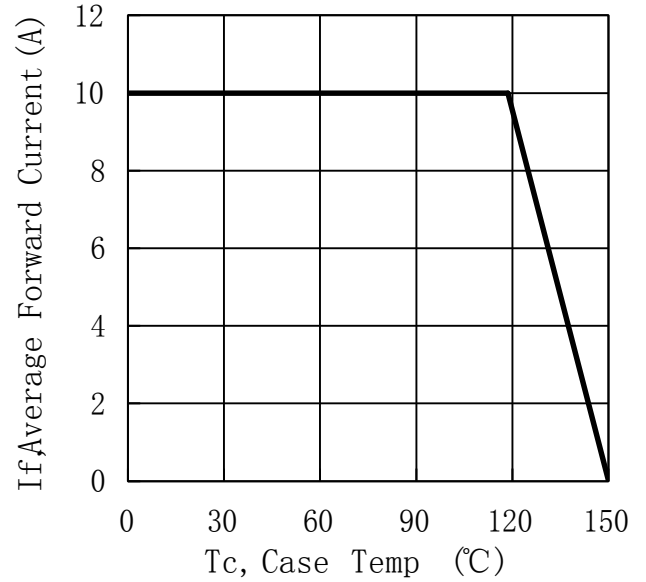


Characteristic Curves

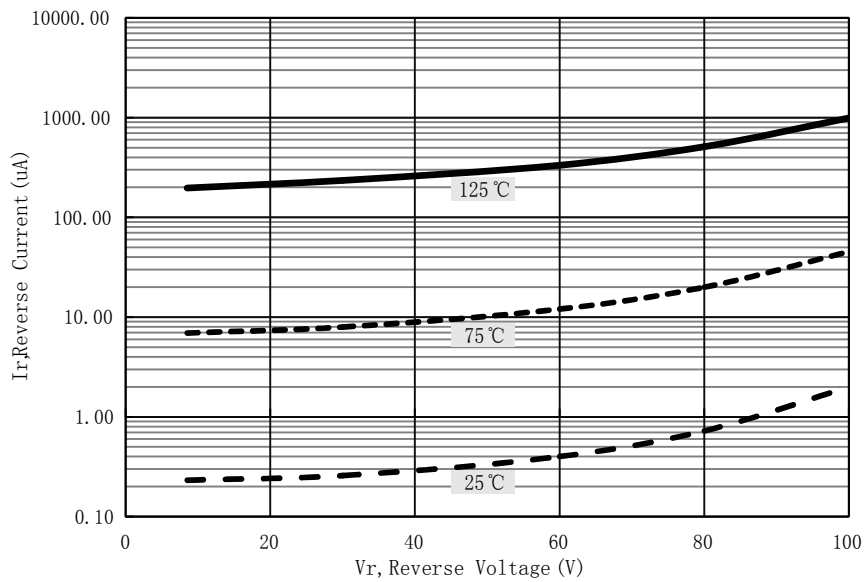
The forward voltage and forward current curve



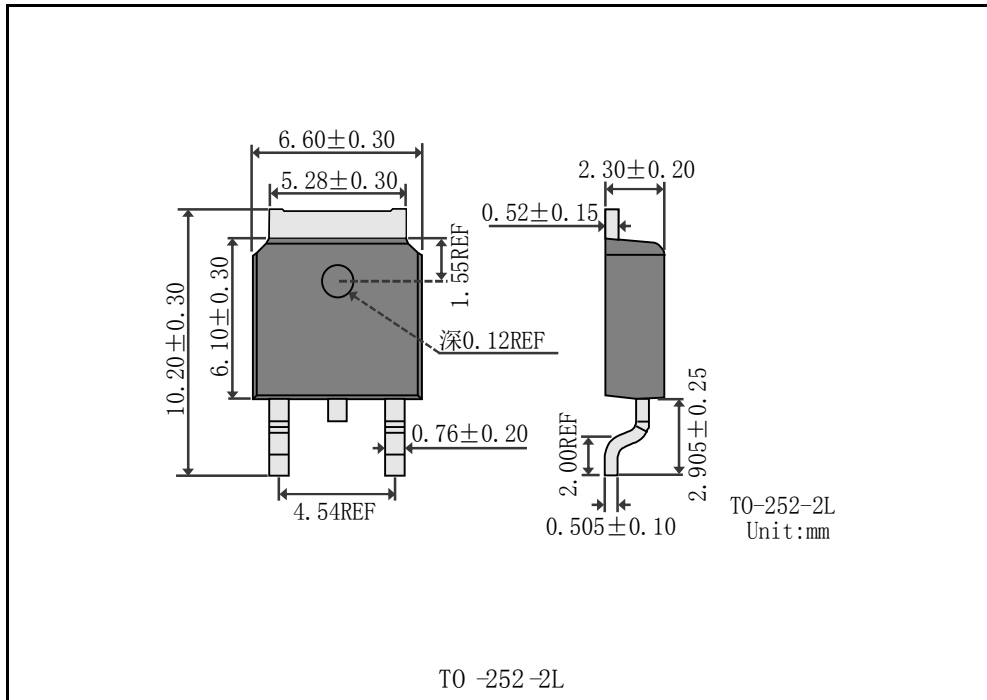
Current derating curve, per element



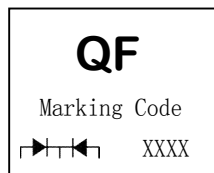
The reverse leak current and the reverse voltage (single device) curve.



Package Outline Dimensions



Marking Information



“QF ”= Product Logo
 “Marking Code” = The Following
 “XXXX ”= Date Code Marking

Packing Information

Packaging	Package	Part Number	Quantity	Size
Tube	T0 -252 -2L	Tube	80 pieces	540*20*5mm
		InnerBox	4000 pieces	565*158*55mm
		Outer Box	20000 pieces	590*310*180mm
Reel	T0 -252 -2L	Reel	3000 pieces	330*15mm
		InnerBox	3000 pieces	345*345*25mm
		Outer Box	30000 pieces	355*290*375mm

