

### Product Character

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

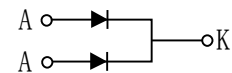
### Primary Use

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

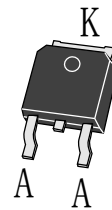
### Summarize

SR20100CS Device optimized for ultra-low forward voltage drop to maximize efficiency in Power Supply applications.

### 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	$I_{FAV}$	20	A
Forward Peak Surge Current (Rated Load 8.3 Half Mssine Wave - According to JEDEC Method)	$I_{FSM}$	260 $\times 2$	A
Operating Junction Temperature	$T_J$	150	$^{\circ}C$
Storage Temperature	$T_{STG}$	-40 ~ 150	$^{\circ}C$
Typical Thermal Resistance (per leg) Package=T0 -252 -2L	$R_{\theta JC}$	3	$^{\circ}C/W$

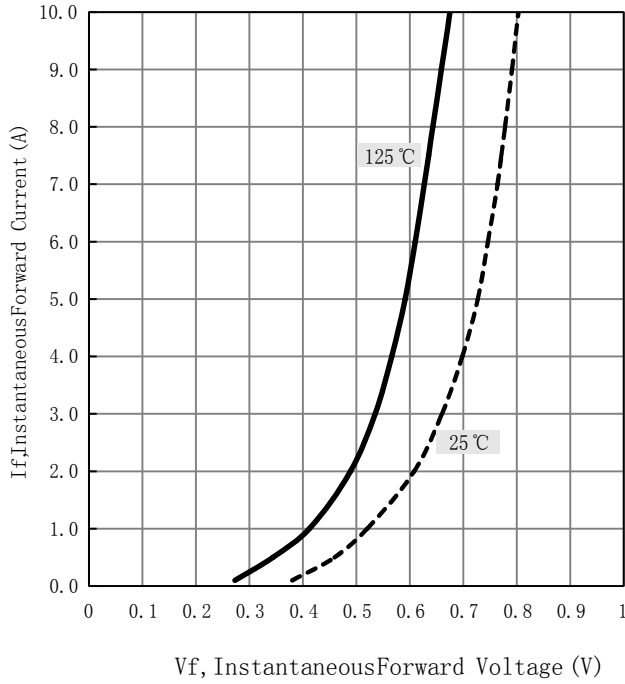
### Electricity Character

Item	Test Condition		Value (min)	Value (typ)	Value (max)	Unit
$V_B$	$T_J = 25^{\circ}C$	$I_R = 1mA$	100	---	---	V
$I_R$	$T_J = 25^{\circ}C$	$V_R = 100V$	---	---	0.01	mA
	$T_J = 125^{\circ}C$	$V_R = 100V$	---	---	10.00	mA
$V_F$	$T_J = 25^{\circ}C$	$I_F = 10A$	---	0.8	0.85	V
	$T_J = 125^{\circ}C$	$(I_{FAV} = 10A \times 2)$	---	---	0.75	V

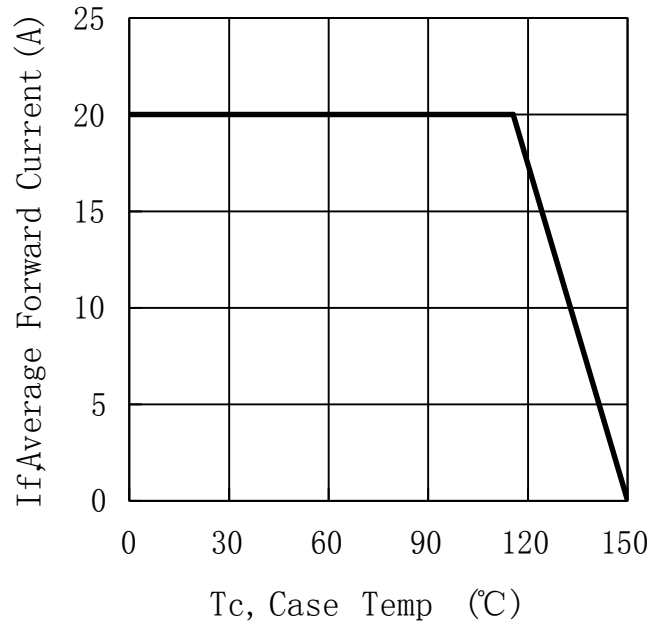


## Characteristic Curves

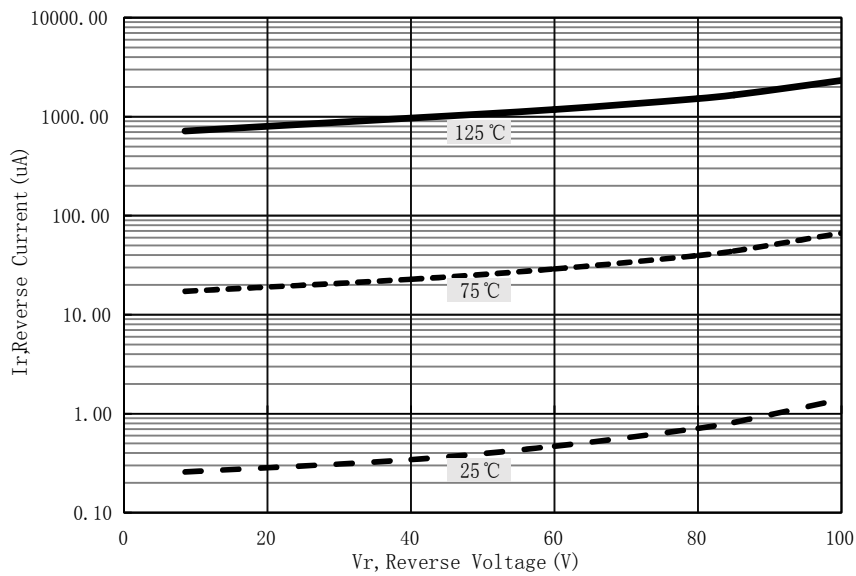
The forward voltage and forward current curve



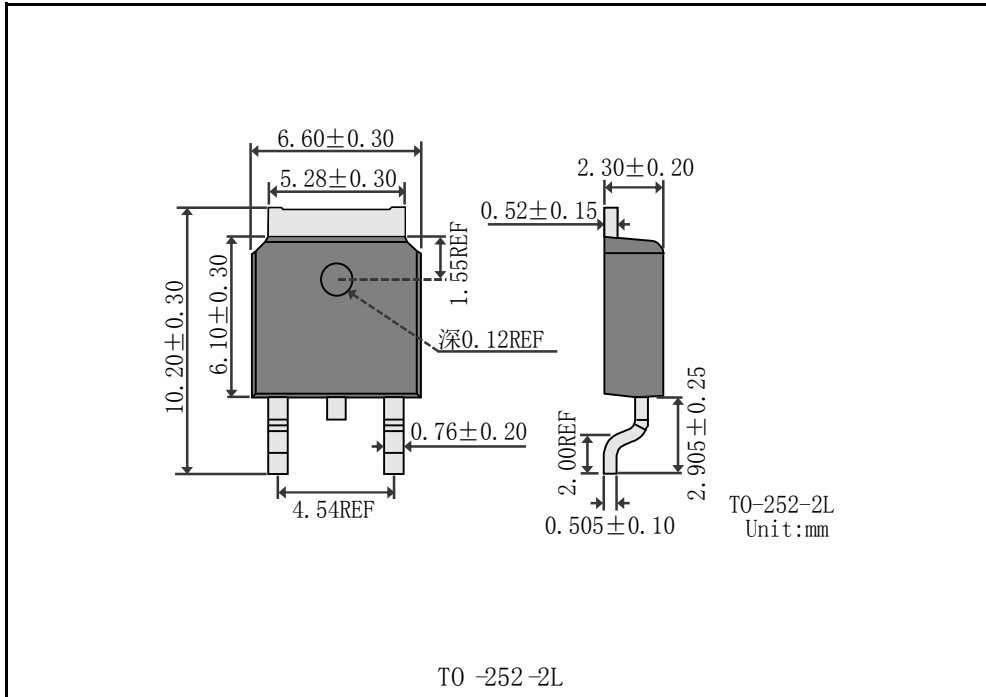
Current derating curve, per element



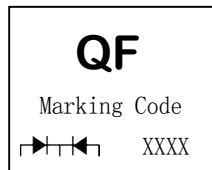
The reverse leak current and the reverse voltage (single device) curve.



## 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	TO -252 -2L	Tube	80 pieces	540*20*5mm
		InnerBox	4000 pieces	565*158*55mm
		Outer Box	20000 pieces	590*310*180mm
Reel	TO -252 -2L	Reel	3000 pieces	330*15mm
		InnerBox	3000 pieces	345*345*25mm
		Outer Box	30000 pieces	355*290*375mm

