

20.0A 100V Schottky Barrier Diode

Product Character

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

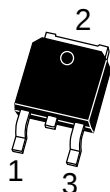
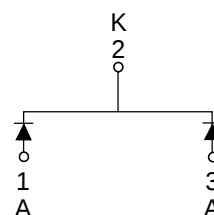
Primary Use

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

Summarize

- SRT20100CS Device optimized for ultra-low forward voltage drop to maximize efficiency in Power Supply applications.

Equivalent Circuit



Package:TO-252-2L

SRT20100CS

SRT20100CS-HF

HF=Halogen Free

Absolute Maximum Ratings

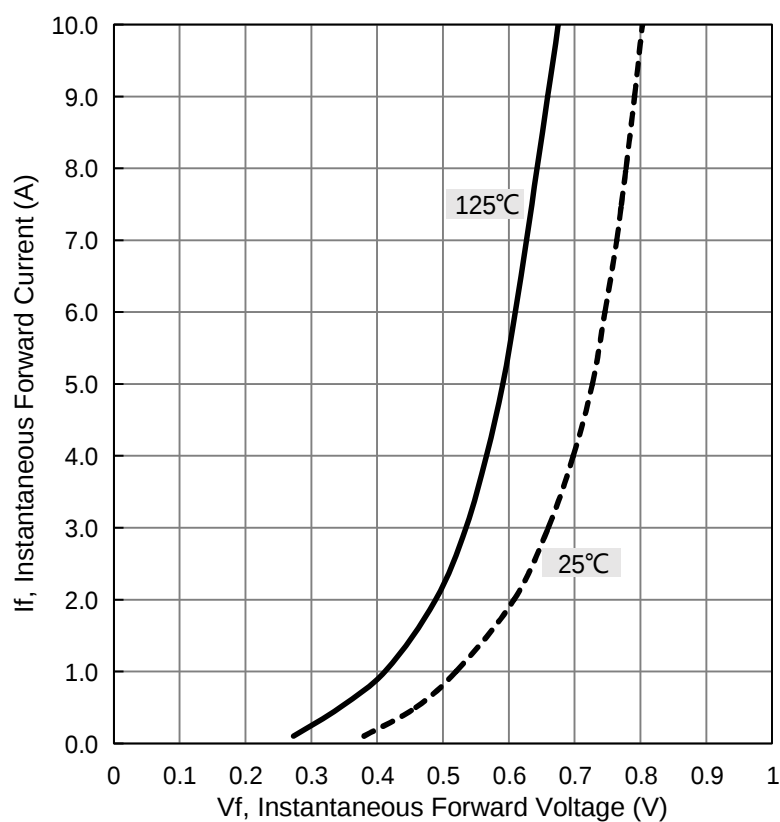
Item	Symbol	Data	Unit
Maximal Inverted Repetitive Peak Voltage	V_{RRM}	100	V
Average Rectified Forward Current (Rated VR-20Khz Square Wave) - 50% duty cycle	I_{FAV}	20	A
Forward Peak Surge Current(Rated Load 8.3 Half Mssine Wave-According to JEDEC Method)	I_{FSM}	260×2	A
Operating Junction Temperature	T_J	-40~150	°C
Storage Temperature	T_{STG}	-40~150	°C
Typical Thermal Resistance(per leg)	Package=TO-252-2L $R_{\theta JC}$	3	°C/W

Electricity Characteristics

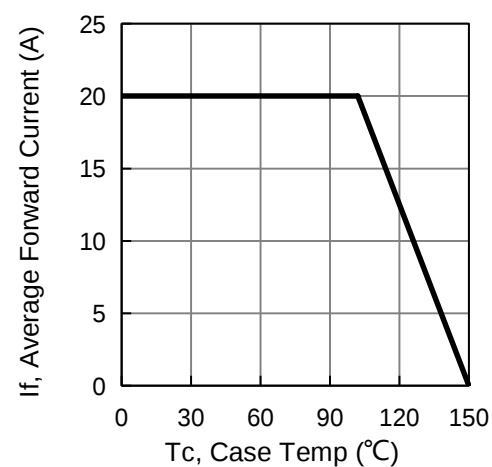
Item	Test Condition		Value(min)	Value(typ)	Value(max)	Unit
V_B	$T_J = 25^{\circ}C$	$I_R = 1mA$	100	---	---	V
I_R	$T_J = 25^{\circ}C$	$VR = 100V$	---	---	0.01	mA
	$T_J = 125^{\circ}C$	$VR = 100V$	---	---	10.00	mA
V_F	$T_J = 25^{\circ}C$	$I_F = 10A$	---	0.8	0.85	V
	$T_J = 125^{\circ}C$	$(I_{FAV} = 10A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

Characteristic Curves

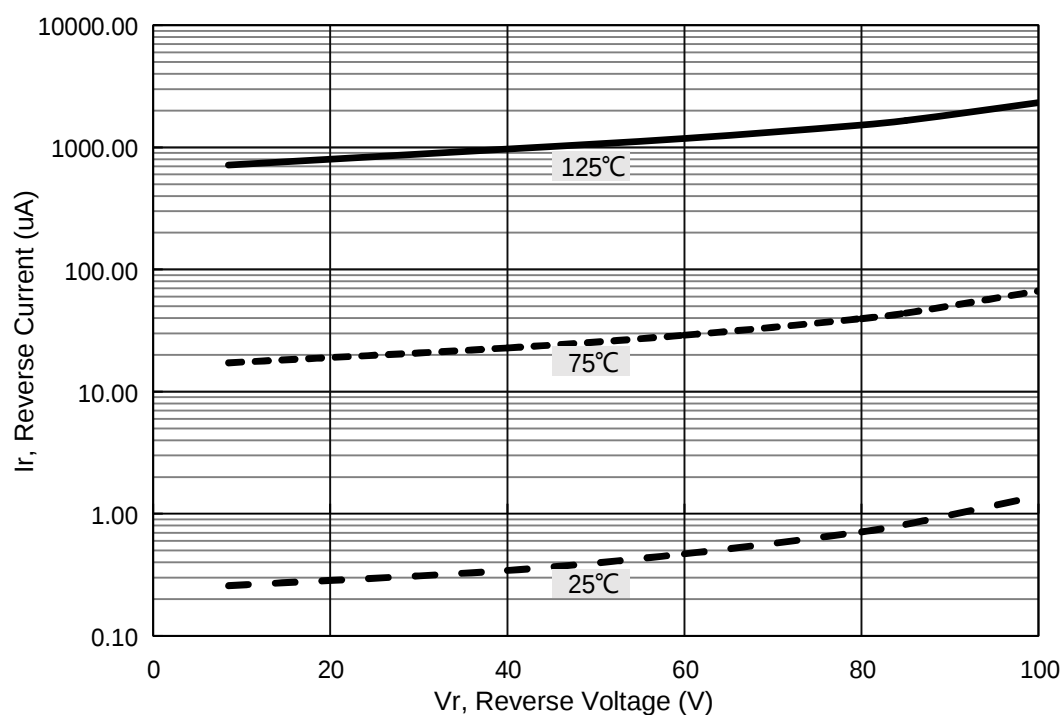
The forward voltage and forward current curve



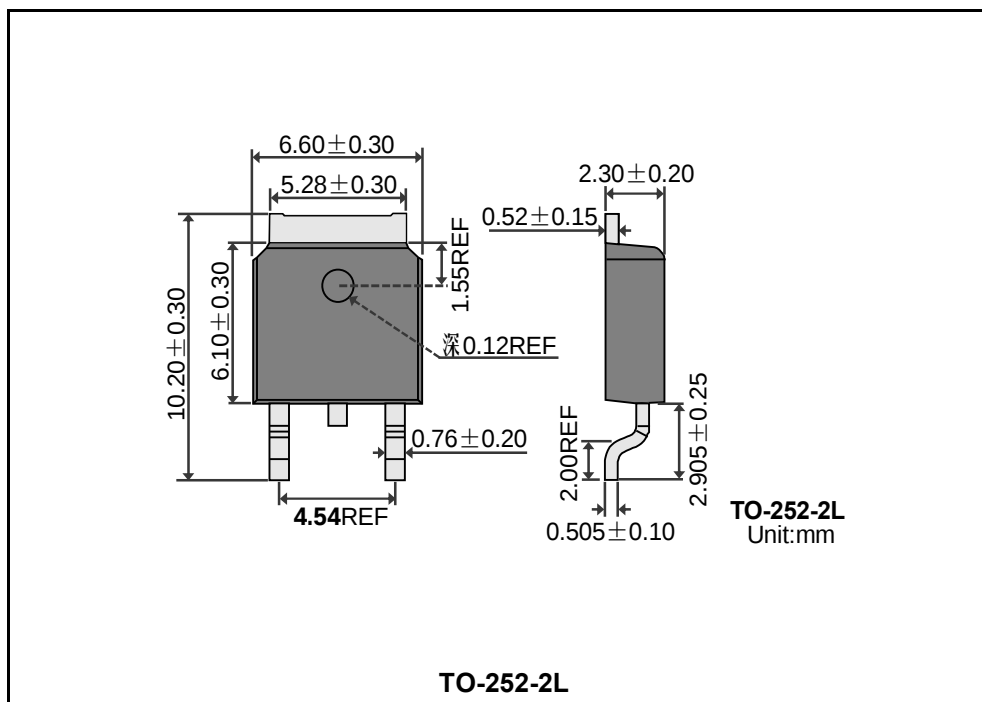
Current derating curve, per element



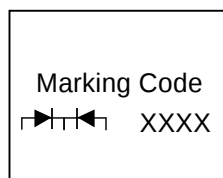
The reverse leak current and the reverse voltage (single-device) curve.



Package Outline Dimensions



Marking Information



“Marking Code”= The Following
“XXXX”= Date Code Marking

Package	Marking Code	Part Number
TO-252-2L	SRT20100CS	SRT20100CS
		SRT20100CS-HF

Packing Information

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