DACO®

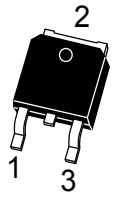
SRD10300

10A Power pack Schottky Barrier Rectifier

■ Productor Character

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

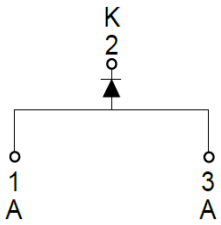
Package:TO-252AC



■ Primary Use

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

■ Equivalent Circuit



■ Summarize

- SRD10300 Device optimized for ultra-low forward voltage drop to maximize efficiency in Power Supply applications.

Absolute Maximum Ratings(Ta=25°C unless otherwise noted)

Item		Symbol	Data	Unit
Maximal Inverted Repetitive Peak Voltage		V_{RRM}	300	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}	160	A
Operating Junction Temperature		T_J	-40～175	°C
Storage Temperature		T_{STG}	-40～175	°C
Typical Thermal Resistance(per leg)	Package=TO-252AC	$R_{\theta JC}$	3	°C/W

Electricity Character Per Diode(Ta=25°C unless otherwise noted)

Item	Test Condition	Value(min)	Value(typ)	Value(max)	Unit
V_B	Tj=25°C,IR=1mA	300	—	—	V
I_R	Tj=25°C,VR=300V	—	—	10	μA
	Tj=125°C,VR=300V	—	—	2	mA
V_F	Tj=25°C,IF=10A	—	0.87	0.95	V
	Tj=125°C,IF=10A	—	—	0.85	V
C_J	Tj=25°C,VR=4V,f=1MHz	—	130	—	pF

Typical Characteristics Curves

Fig1. Typical Forward Current and Forward Voltage

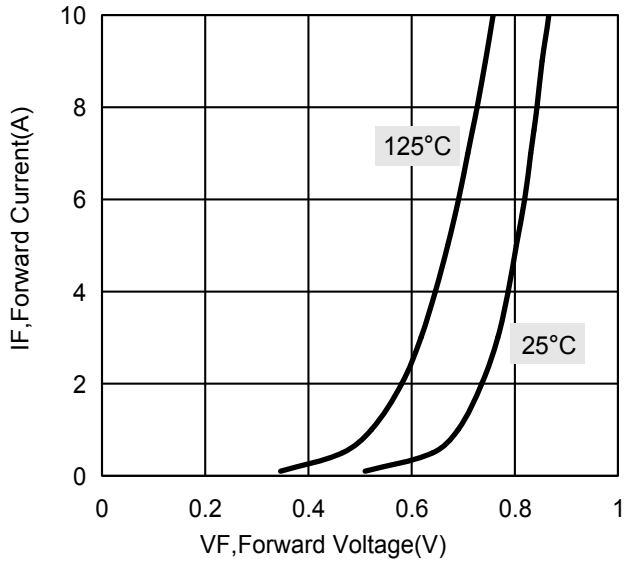


Fig2. Typical Current Derating Curve,Perelement

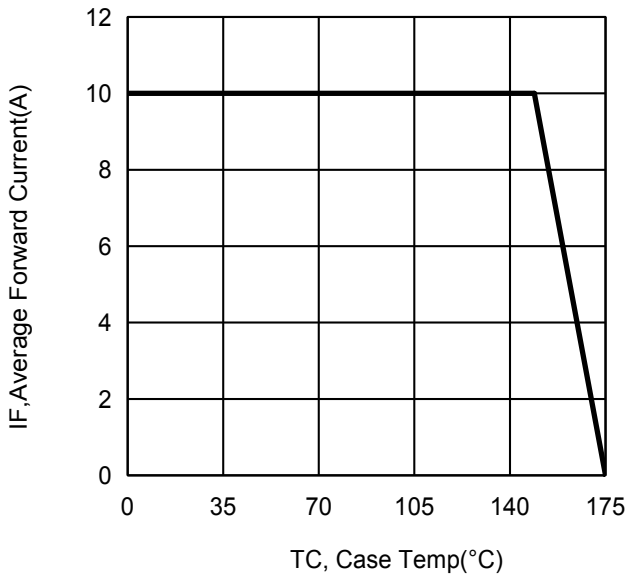


Fig3. Typical Reverse Current and Reverse Voltage

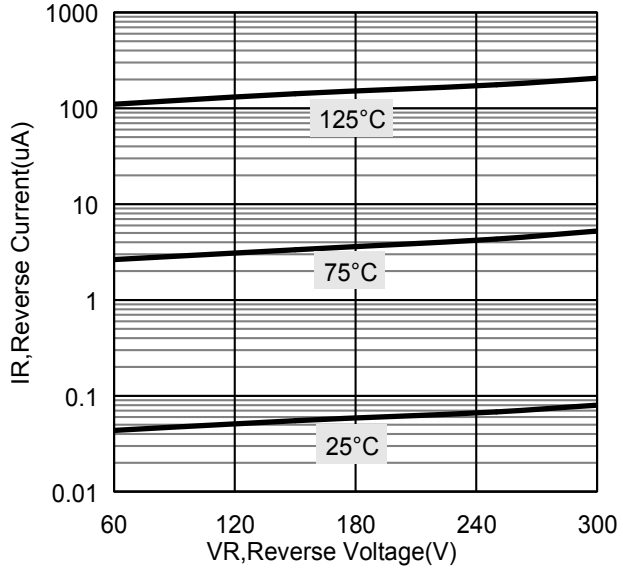
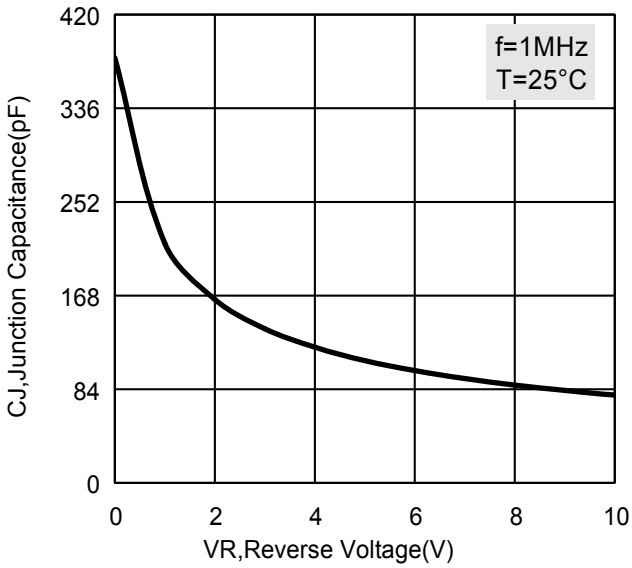
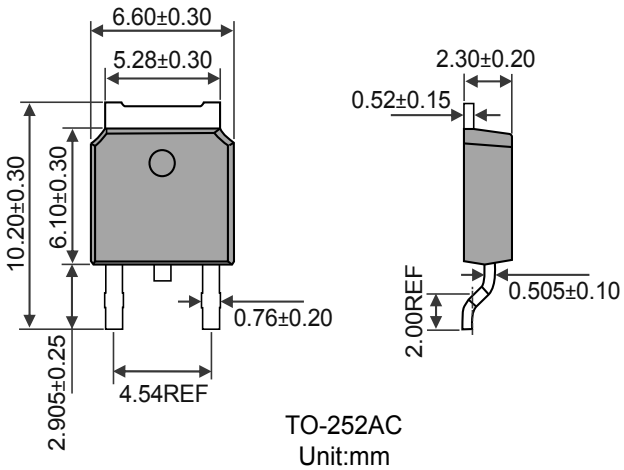


Fig4. Typical Junction Capacitance and Reverse Voltage



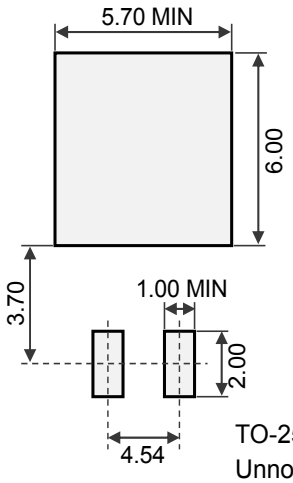
Package Outline Dimensions & Suggested Solder Pad Layout

Package Outline Dimensions



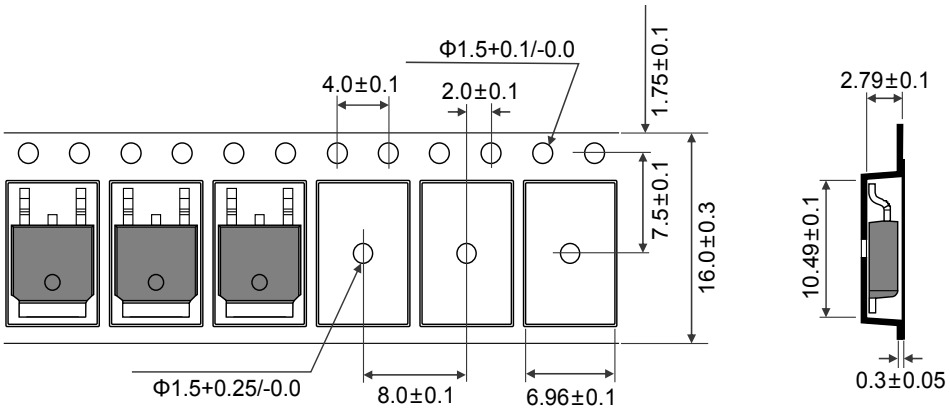
TO-252AC
Unit:mm

Suggested Solder Pad Layout



TO-252AC
Unnoted Tolerance: ±0.05
Unit:mm

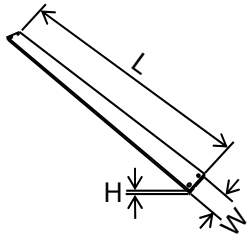
Reel Tape Dimensions (Dimensions in mm)



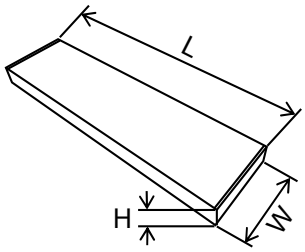
Packing Information

Packaging	Part Number	Quantity(pcs)	Size(mm)
Tube	Tube	80	L540×W20×H5
	Inner Box	4000	L570×W115×H55
	Outer Box	20000	L595×W320×H135
Reel	Reel	3000	Φ330×THK17
	Inner Box	3000	L350×W340×H25
	Outer Box	30000	L355×W300×H360

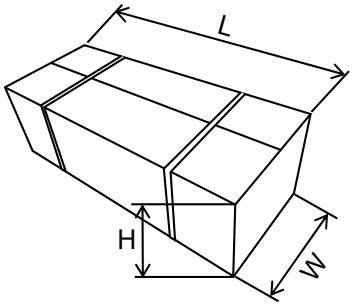
Packaging:Tube



Tube

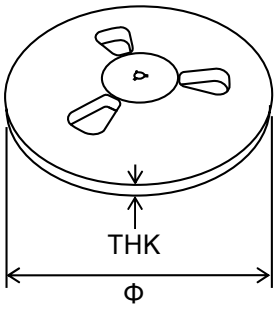


Tube Inner Box

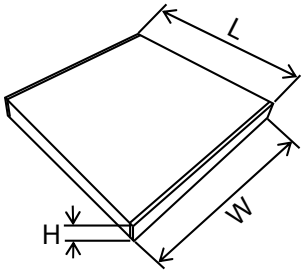


Tube Outer Box

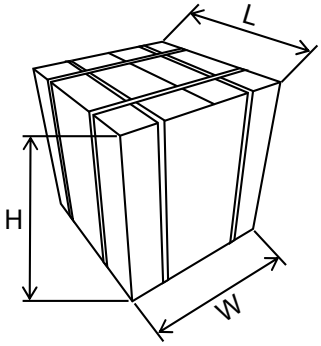
Packaging:Reel



Reel



Reel Inner Box



Reel Outer Box

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