■ 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.

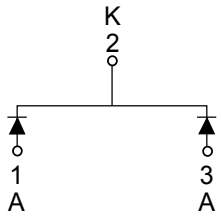
■ Primary Use

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

■ Summarize

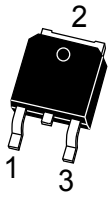
- RSTD1045H Device optimized f ultra-low forward voltage drop to maximize efficiency in Power Supply applications.

■ Equivalent Circuit



RoHS

Reach



Package:TO-252-2L

RSTD1045H

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

Item		Symbol	Data	Unit
Maximal Inverted Repetitive Peak Voltage		V_{RRM}	45	V
Average Rectified Forward Current(Rated VR-20Khz Square Wave)-50% duty cycle	Per Device	I_{FAV}	10	A
	Per Diode		5	
Forward Peak Surge Current(Rated Load 8.3 Half Mssine Wave-According to JEDEC Method)	Per Diode	I_{FSM}	190	A
Operating Junction Temperature		T_J	-40～125	°C
Storage Temperature		T_{STG}	-40～125	°C
Typical Thermal Resistance(per leg)	Package=TO-252-2L	$R_{\theta JC}$	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	45	—	—	V
I_R	Tj=25°C,VR=45V	—	—	100	μA
	Tj=100°C,VR=45V	—	—	10	mA
V_F	Tj=25°C,IF=5A	—	0.53	0.6	V
	Tj=125°C,IF=5A	—	—	0.55	V
C_J	Tj=25°C,VR=4V,f=1MHz	—	210	—	pF

Typical Characteristics Curves

Fig1.Typical Forward Current and Forward Voltage

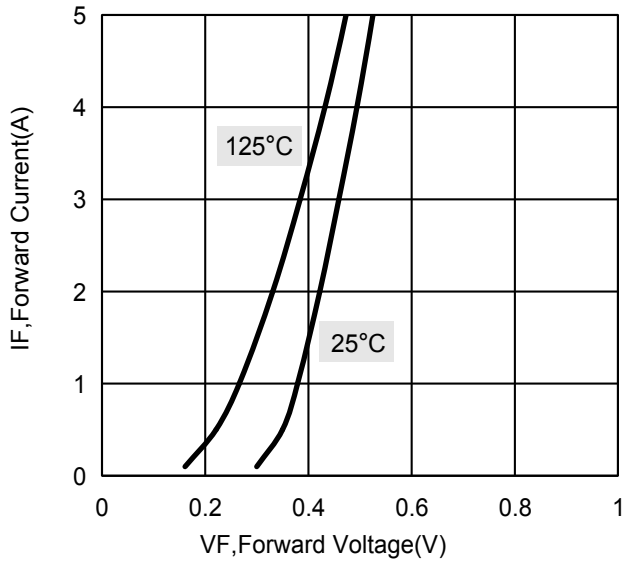


Fig2.Typical Current Derating Curve,Perelement

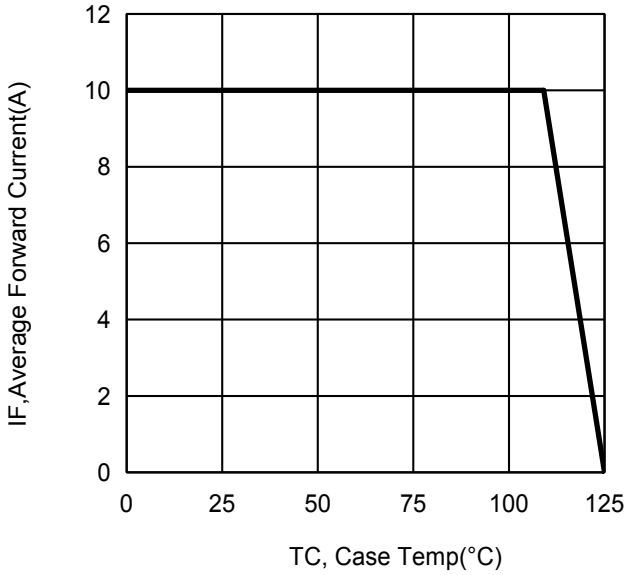


Fig3.Typical Reverse Current and Reverse Voltage

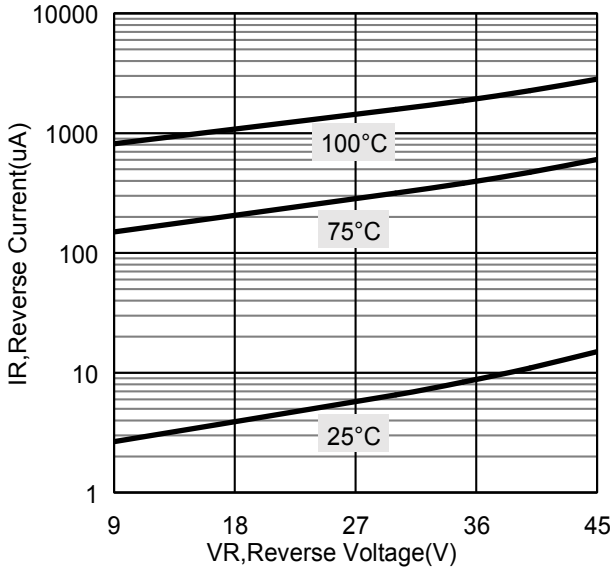
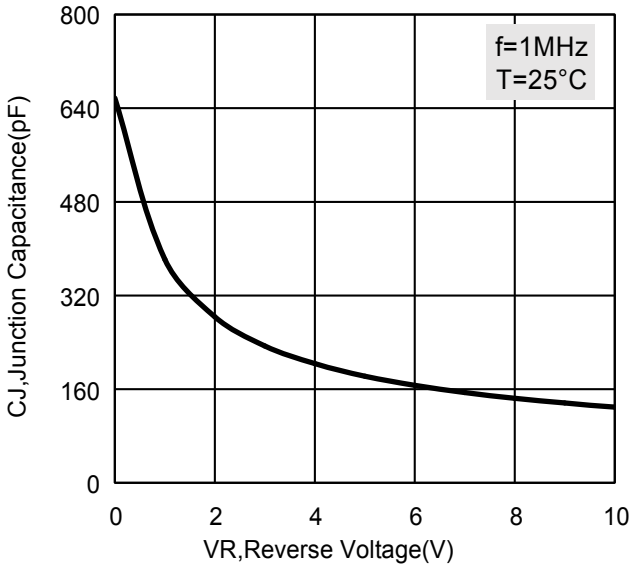
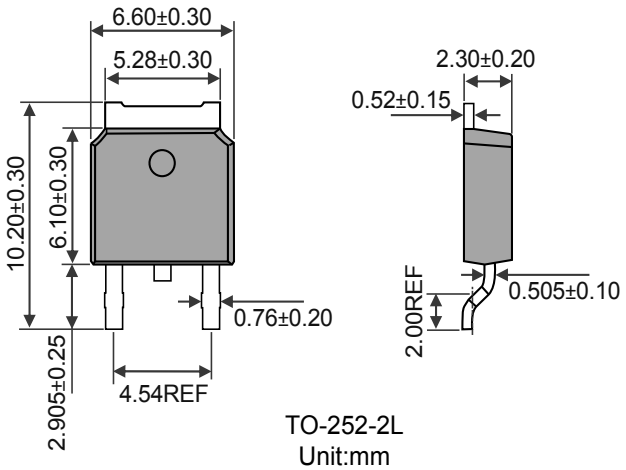


Fig4.Typical Junction Capacitance and Reverse Voltage



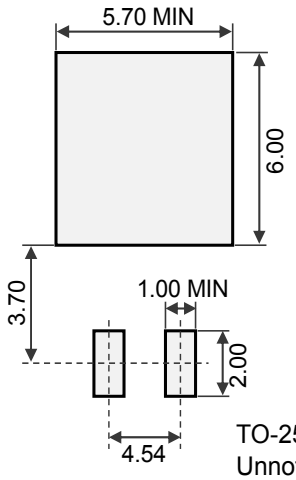
Package Outline Dimensions & Suggested Solder Pad Layout

Package Outline Dimensions



TO-252-2L
Unit:mm

Suggested Solder Pad Layout



TO-252-2L
Unnoted Tolerance:±0.05
Unit:mm

Reel Tape Dimensions (Dimensions in mm)