

Descriptions

Schottky Barrier Diode in a TO-252 Plastic Package.

Features

High Forward Surge Capability, Ultra Low Forward Voltage Drop, Excellent High Temperature Stability.

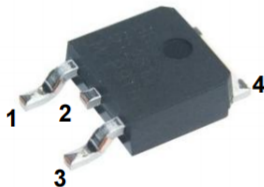
Applications

For use in low voltage, high frequency inverters, free wheeling, and polarity protection applications.

Ordering Information

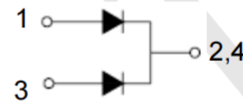
Shipping Qty:2500pcs Tape& Reel

TO-252



PIN1 : Anode
PIN 2,4 : Cathode
PIN 3 : Anode

Equivalent Circuit



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

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V _{RRM}	100	V
RMS Reverse Voltage	V _{RMS}	70	V
DC Blocking Voltage	V _{DC}	100	V
Maximum Average Forward Output Current	I _{F(AV)}	20	A
Peak Forward Surge Current (8.3ms single half sine-wave)	I _{FSM}	150	A

Thermal Characteristics (T_A=25°C unless otherwise noted)

Parameter	Symbol	Value	Unit
Thermal Resistance (Junction-to-Air) *1	R _{θJA}	36	°C/W
Thermal Resistance (Junction-to-Case) *1	R _{θJC}	14	°C/W
Thermal Resistance (Junction-to-Lead) *1	R _{θJL}	6	°C/W
Operating junction Temperature	T _J	-55 ~ +150	°C
Storage Temperature Range	T _{STG}	-55 ~ +150	°C

Electrical Characteristics ($T_A=25^\circ\text{C}$ unless otherwise noted)

Parameter	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward Voltage	V_F	$I_F = 10\text{A}, T_A = 25^\circ\text{C}$	-	-	0.85	V
		$I_F = 10\text{A}, T_A = 125^\circ\text{C}$	-	-	0.7	V
Maximum Peak Reverse Current	I_R	$V_R = \text{Rated } V_{RRM}, T_A = 25^\circ\text{C}$	-	-	0.1	mA
		$V_R = \text{Rated } V_{RRM}, T_A = 125^\circ\text{C}$	-	-	50	mA
Reverse Recovery Time	t_{rr}	$I_F = 1\text{A}, V_R = 30\text{V}$	-	18	-	ns
Reverse Recovery Charge	Q_{rr}	$dI/dt = 100\text{A}/\mu\text{s}$	-	8	-	nC
Reverse Recovery Time	t_{rr}	$I_F = 10\text{A}, V_R = 100\text{V}$	-	38	-	ns
Reverse Recovery Charge	Q_{rr}	$dI/dt = 200\text{A}/\mu\text{s}$	-	52	-	nC
Junction Capacitance	C_J	$V_R = 4\text{V}, f = 1\text{MHz}$	-	350	-	pF

Typical Electrical Characteristic Curves

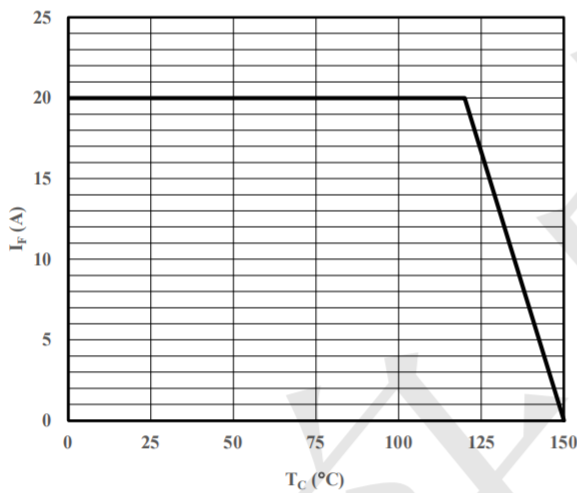


Fig 1 Forward Derating Curve

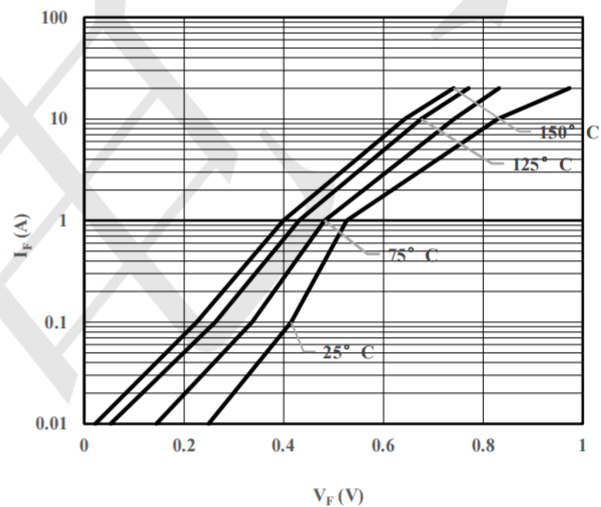


Fig 2 Typical Forward Characteristic

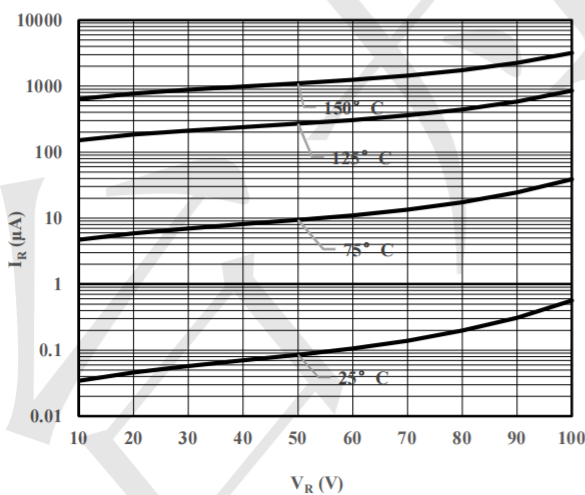


Fig 3 Typical Reverse Characteristic

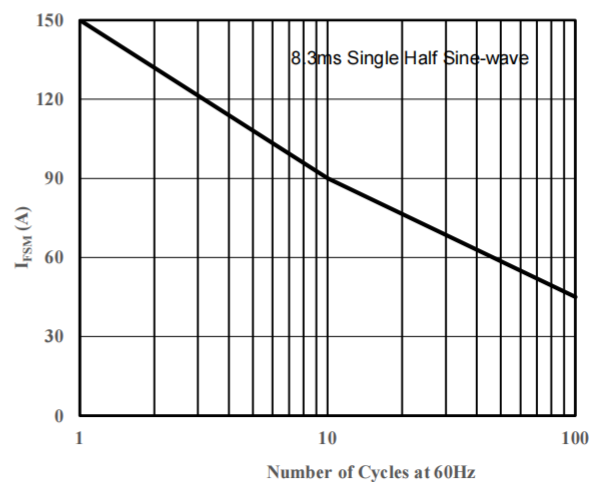
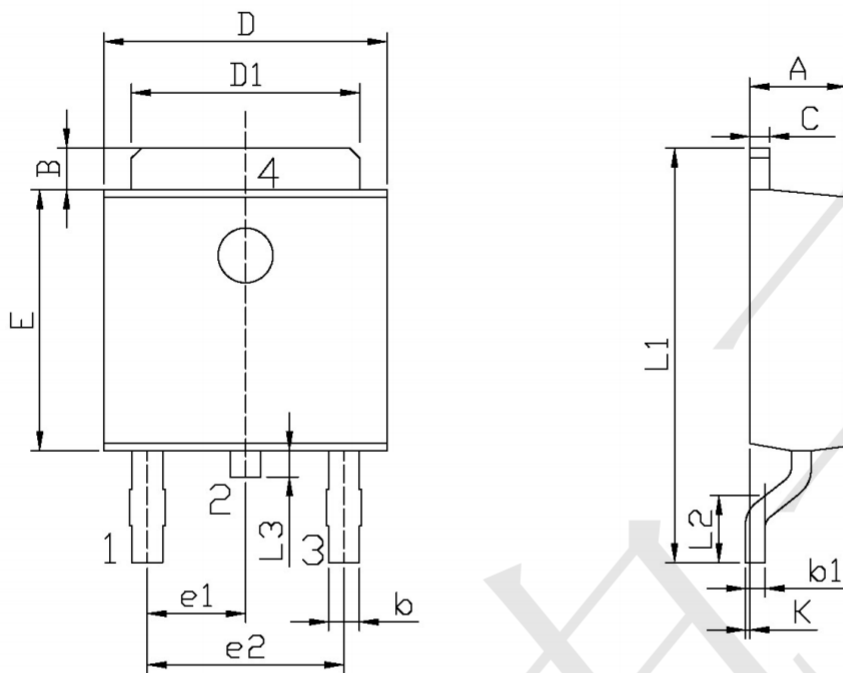


Fig 4 Maximum Non-Repetitive Peak Surge Current

Outline Drawing - TO-252 (unit:mm)



单位: mm

Symbol	Dimensions In Millimeters		Symbol	Dimensions In Millimeters	
	Min	Max		Min	Max
A	2.20	2.40	E	5.95	6.25
B	0.95	1.25	e1	2.24	2.34
b	0.50	0.70	e2	4.43	4.73
b1	0.45	0.55	L1	9.45	9.95
C	0.45	0.55	L2	1.25	1.75
D	6.45	6.75	L3	0.60	0.90
D1	5.10	5.50	K	0.00	0.10