

/ Descriptions

TO-252
Schottky Barrier Diode in a TO-252 Plastic Package.

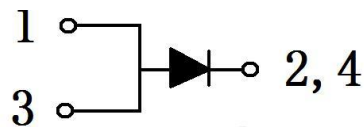
/ Features

$V_F(\text{typ})=0.2\text{V}$
High Forward Surge Capability, Ultra Low Forward Voltage Drop $V_F(\text{typ})=0.2\text{V}$, Excellent High Temperature Stability.

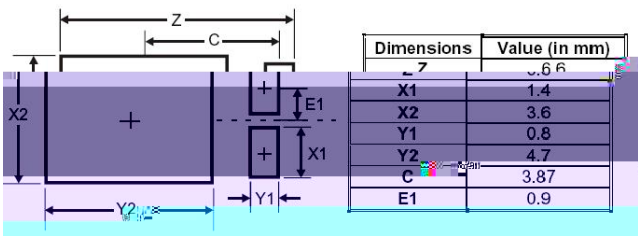
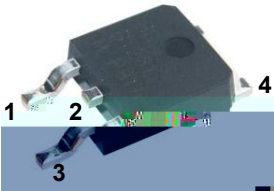
/ Applications

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

/ Equivalent Circuit



/ Pinning



PIN1 Anode PIN 2,4 Cathode PIN 3 Anode

Suggested Pad layout

/ h_{FE} Classifications & Marking

See Marking Instructions.

/ Absolute Maximum Ratings($T_a=25^\circ\text{C}$)

Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage Peak Reverse Voltage	V_{RRM} V_{RWM} V_{RM}	45	V
RMS Reverse voltage	$V_{R(RMS)}$	31.5	V
Average Rectified Output Current	I_O	10	A
Non-Repetitive Peak Forward Surge Current	I_{FSM}	250	A
Junction Temperature Range	$T_{J\text{ MAX}}$	150	
Storage Temperature Range	T_{stg}	-55 150	
Typical Thermal Resistance	$R_{\theta JA}$ Note 1	73	/W

/ Electrical Characteristics($T_a=25^\circ\text{C}$)

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Voltage	V_R	$I_R=0.5\text{mA}$	45			V
Forward voltage	V_F	$I_F=2\text{A}$ $T_J=25$		0.33	0.38	V
		$I_F=2\text{A}$ $T_J=125$		0.20		V
		$I_F=10\text{A}$ $T_J=25$		0.42	0.46	V
		$I_F=10\text{A}$ $T_J=125$		0.35		V
Instantaneous Reverse Current	I_R Note 2	$V_R=45\text{V}$ $T_J=25$		0.06	0.12	mA
		$V_R=45\text{V}$ $T_J=100$			12	mA
		$V_R=45\text{V}$ $T_J=125$			50	mA

Notes

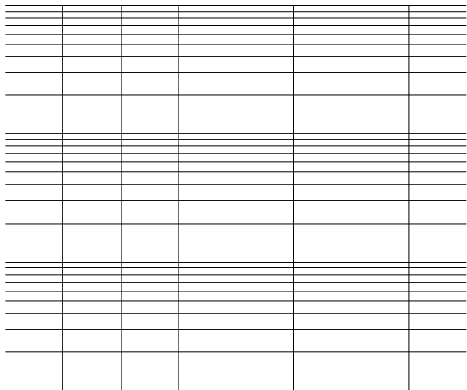
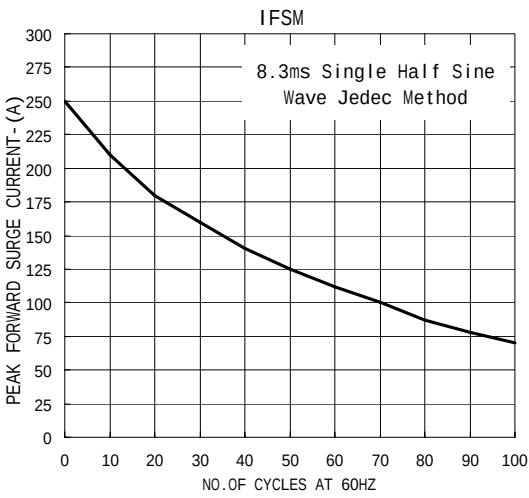
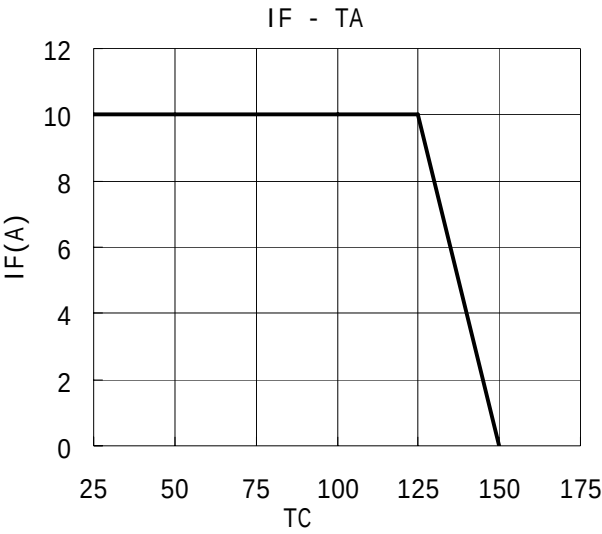
/FR-4 PCB, 2oz. Copper, minimum recommended pad

layout per.

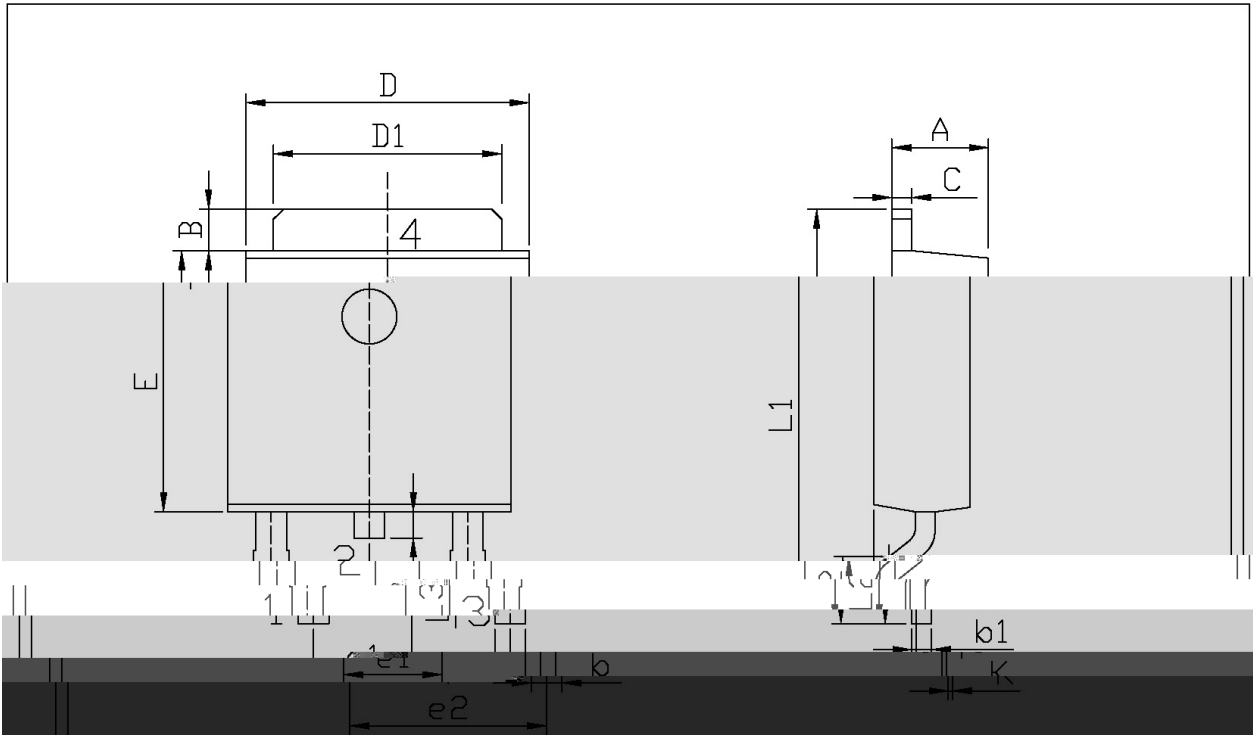
Short duration pulse test used to minimize self-heating

effect.

/ Electrical Characteristic Curve



/ Package Dimensions

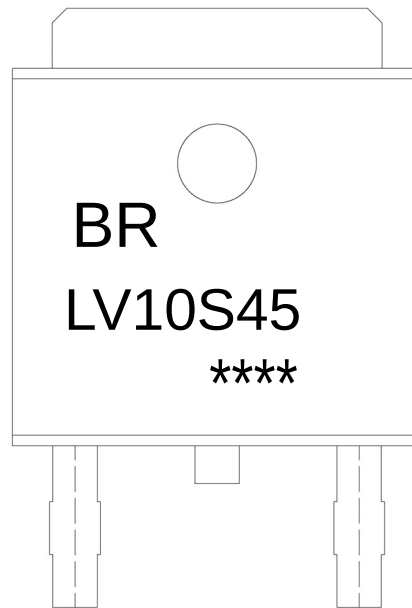


单位: mm

Dimensions In Millimeters				Dimensions In Millimeters			
Symbol		Min	Max	Symbol		Min	Max
A		2.20	2.40	E		5.95	6.25
B		0.35	1.25	e1		2.24	2.34
b		0.50	0.70	e2		4.43	4.73
b1		0.45	0.55	L1		0.45	0.95
C		0.40	0.50	L3		1.25	
D		6.45	6.75	K		0.00	
D1		5.10	5.50				

T0-252

/ **Marking Instructions**



Note:

BR:	Company Code
	Product Type Code.
****:	Lot No. Code, code change with Lot No.

() / **Temperature Profile for IR Reflow Soldering(Pb-Free)**