

/ Descriptions

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

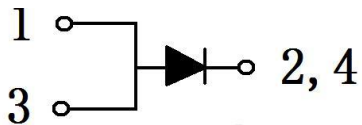
/ Features

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

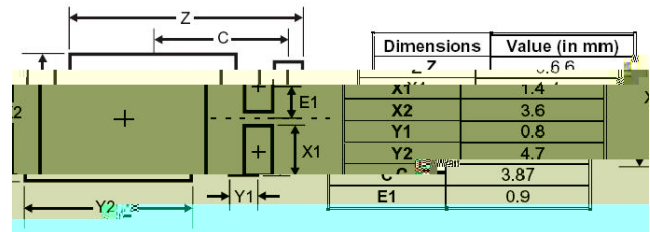
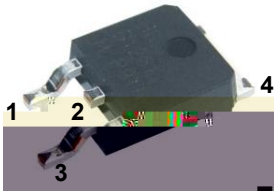
/ Applications

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(Ta=25)

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	$T_{j MAX}$	150	
Storage Temperature Range	T_{stg}	-55 150	
Typical Thermal Resistance	R_{JA} Note 1	73	/W

/ Electrical Characteristics(Ta=25)

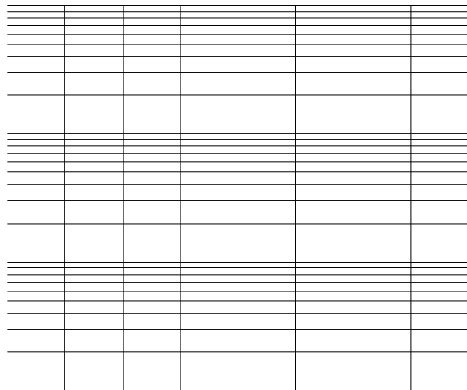
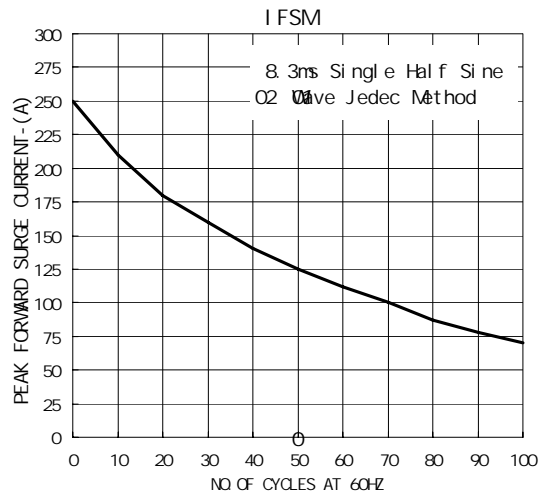
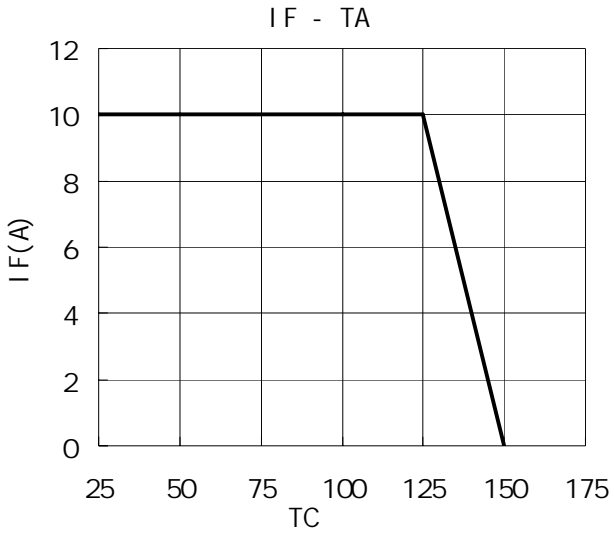
Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Voltage	V_R	$I_R=0.5mA$	45			V
Forward voltage	V_F	$I_F=2A$ $T_J=25$		0.33	0.38	V
		$I_F=2A$ $T_J=125$		0.20		V
		$I_F=10A$ $T_J=25$		0.42	0.46	V
		$I_F=10A$ $T_J=125$		0.35		V
Instantaneous Reverse Current	I_R Note 2	$V_R=45V$ $T_J=25$		0.06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

Notes

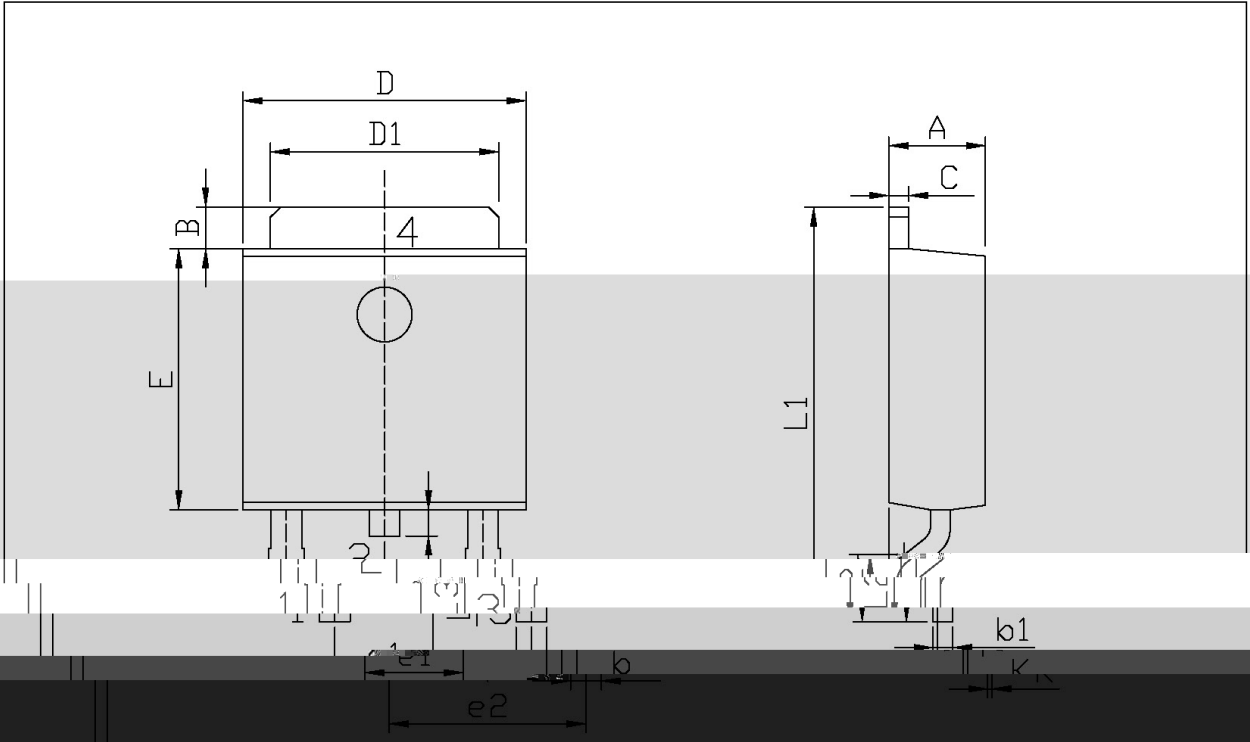
/FR-4 PCB, 2oz. Copper, minimum recommended pad layout per.

Short duration pulse test used to minimize self-heating effect.

/ Electrical Characteristic Curve



/ Package Dimensions

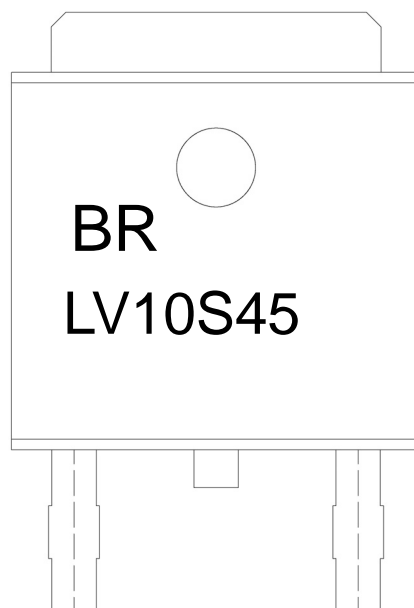


单位: mm

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	2.38
b	0.50	0.70	e2	4.43	4.70
b1	0.45	0.55	L1	9.45	9.90
~	~0.45	~0.55	L2	1.25	1.50
D	6.45	6.75	L3	0.60	0.70
D1	5.10	5.50	K	0.00	0.10

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)