

/ Descriptions

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

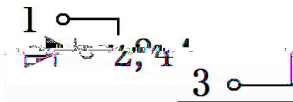
/ Features

$V_F(\text{typ})=0.26\text{V}$
High Forward Surge Capability, Ultra Low Forward Voltage Drop $V_F(\text{typ})=0.26\text{V}$, Excellent High Temperature Stability.

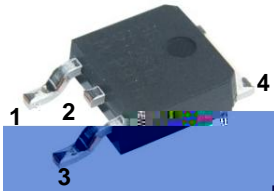
/ Applications

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

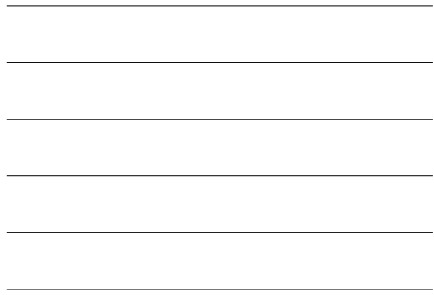
/ h_{FE} Classifications & Marking

See Marking Instructions.

Parameter	Symbol	Rating	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_{RM}	45	V
RMS Reverse Voltage	$V_{R(RMS)}$	31.5	V
Average Rectified Current	I_O	5.0	A
Peak Forward Surge Current	I_{FSM}	80	A
Junction Temperature Range	T_{jMAX}	150	
Storage Temperature Range	T_{stg}	-55 150	
Typical thermal resistance	R_{JA} Note 1	73	/W

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse Voltage	V_{BR}	$I_R=0.5mA$	45			V
Forward Voltage	V_F	$I_F=2A$ $T_J=25$		0.37	0.42	V
		$I_F=2A$ $T_J=125$		0.26		V
		$I_F=5A$ $T_J=25$		0.43	0.48	V
		$I_F=5A$ $T_J=125$		0.37		V
Instantaneous Reverse Current	I_R Note 2	$V_R=45V$ $T_J=25$		0.02	0.3	mA
		$V_R=35V$ $T_J=85$		1.8	10	mA
		$V_R=45V$ $T_J=125$		15	100	mA

/ Electrical Characteristic Curve



/ Package Dimensions



Symbol	Parameter	Unit	Value	Symbol	Parameter	Unit	Value
	Package width	mm	12.7		Package width (central)	mm	10.4
	Package width (right)	mm	4.0		Package width (right)	mm	4.0
	Pin 1 location	mm	0.0		Pin 2 location	mm	1.27
	Pin 3 location	mm	2.54		Pin 4 location	mm	3.81
	Pin 5 location	mm	5.08		Pin 6 location	mm	6.35
	Pin 7 location	mm	7.62		Pin 8 location	mm	8.90
	Pin 9 location	mm	10.16		Pin 10 location	mm	11.43
	Pin 11 location	mm	12.70		Pin 12 location	mm	13.97
	Pin 13 location	mm	15.24		Pin 14 location	mm	16.51
	Pin 15 location	mm	17.78		Pin 16 location	mm	19.05
	Pin 17 location	mm	19.05		Pin 18 location	mm	20.32
	Pin 19 location	mm	20.32		Pin 20 location	mm	21.59
	Pin 21 location	mm	21.59		Pin 22 location	mm	22.86
	Pin 23 location	mm	22.86		Pin 24 location	mm	24.13
	Pin 25 location	mm	24.13		Pin 26 location	mm	25.40
	Pin 27 location	mm	25.40		Pin 28 location	mm	26.67
	Pin 29 location	mm	26.67		Pin 30 location	mm	27.94
	Pin 31 location	mm	27.94		Pin 32 location	mm	29.21
	Pin 33 location	mm	29.21		Pin 34 location	mm	30.48
	Pin 35 location	mm	30.48		Pin 36 location	mm	31.75
	Pin 37 location	mm	31.75		Pin 38 location	mm	33.02
	Pin 39 location	mm	33.02		Pin 40 location	mm	34.29
	Pin 41 location	mm	34.29		Pin 42 location	mm	35.56
	Pin 43 location	mm	35.56		Pin 44 location	mm	36.83
	Pin 45 location	mm	36.83		Pin 46 location	mm	38.10
	Pin 47 location	mm	38.10		Pin 48 location	mm	39.37
	Pin 49 location	mm	39.37		Pin 50 location	mm	40.64
	Pin 51 location	mm	40.64		Pin 52 location	mm	41.91
	Pin 53 location	mm	41.91		Pin 54 location	mm	43.18
	Pin 55 location	mm	43.18		Pin 56 location	mm	44.45
	Pin 57 location	mm	44.45		Pin 58 location	mm	45.72
	Pin 59 location	mm	45.72		Pin 60 location	mm	46.99
	Pin 61 location	mm	46.99		Pin 62 location	mm	48.26
	Pin 63 location	mm	48.26		Pin 64 location	mm	49.53
	Pin 65 location	mm	49.53		Pin 66 location	mm	50.80
	Pin 67 location	mm	50.80		Pin 68 location	mm	52.07
	Pin 69 location	mm	52.07		Pin 70 location	mm	53.34
	Pin 71 location	mm	53.34		Pin 72 location	mm	54.61
	Pin 73 location	mm	54.61		Pin 74 location	mm	55.88
	Pin 75 location	mm	55.88		Pin 76 location	mm	57.15
	Pin 77 location	mm	57.15		Pin 78 location	mm	58.42
	Pin 79 location	mm	58.42		Pin 80 location	mm	59.69
	Pin 81 location	mm	59.69		Pin 82 location	mm	60.96
	Pin 83 location	mm	60.96		Pin 84 location	mm	62.23
	Pin 85 location	mm	62.23		Pin 86 location	mm	63.50
	Pin 87 location	mm	63.50		Pin 88 location	mm	64.77
	Pin 89 location	mm	64.77		Pin 90 location	mm	66.04
	Pin 91 location	mm	66.04		Pin 92 location	mm	67.31
	Pin 93 location	mm	67.31		Pin 94 location	mm	68.58
	Pin 95 location	mm	68.58		Pin 96 location	mm	69.85
	Pin 97 location	mm	69.85		Pin 98 location	mm	71.12
	Pin 99 location	mm	71.12		Pin 100 location	mm	72.39

TU-232

/ Marking Instructions



BR

LV5S45

Note:

BR: Company Code

LV5S45 Product Type.

****: Lot No. Code, code change with Lot No.

