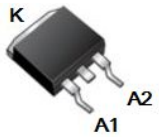
WSB5552TH

Power Schottky Barrier Rectifier

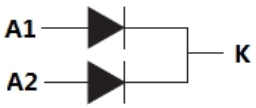
Http://www.sh-willsemi.com

Features

- 2x5A average rectified forward current
- Low forward voltage and Low leakage current
- Excellent high junction temperature stability
- High forward surge capability



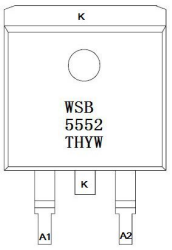
TO-263E-2L



Circuit

Applications

- High frequency switch model power supplies
- DC-DC Convertors, Power adapters



Marking

Absolute maximum ratings				
Parameter		**Symbol**	**Value**	**Unit**
Reverse voltage (repetitive peak)		V_{RM}	100	V
Reverse voltage (DC)		V_R	100	V
Average rectified forward current	Per diode	I_F	5	A
	Per device	I_F	10	A
Peak Forward Surge Current (1)		I_{FSM}	100	A
Junction temperature		T_J	150	^{0}C
Operating temperature		Topr	-55 ~ 150	^{0}C
Storage temperature		Tstg	-55 ~ 150	^{0}C
Thermal Resistance Ratings				
Maximum Thermal Resistance Junction To case (Per leg)		$R_{\theta JC}$	2.2	°C/W

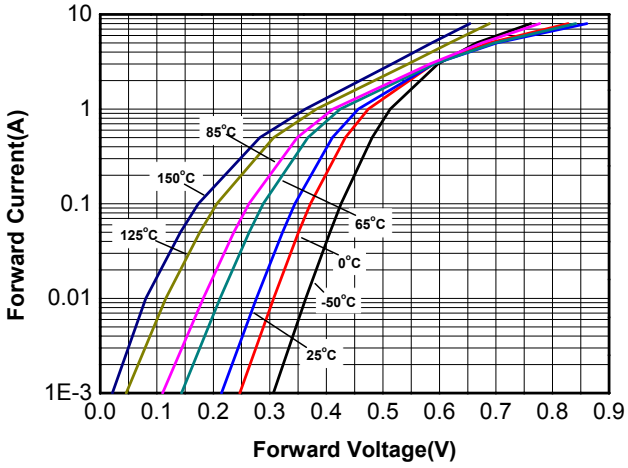
Order information			
Device	**Package**	**Marking**	**Shipping**
WSB5552TH-3/T	TO-263E-2L	WSB5552THYW (2)	800/Reel&Tape

Note 1: Pulse Width=8.3ms，Single Half Sine Pulse

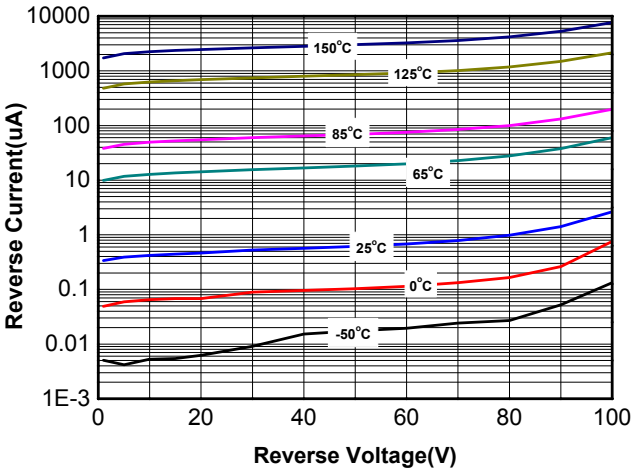
Note 2: WSB5552= Device code;TH=Special Code; Y=Year; W=Week (A~z)

Electronics characteristics (T_A=25°C, Per diode)						
Parameter	**Symbol**	**Condition**	**Min.**	**Typ.**	**Max.**	**Unit**
Reverse Breakdown Voltage	V_R	I_R=0.5mA	100	-	-	V
Forward voltage	V_F	I_F=5A	-	-	0.80	V
Reverse current	I_R	V_R=100V	-	-	0.1	mA
Junction capacitance	C_J	V_R=25V, F=1MHz	-	62	-	pF

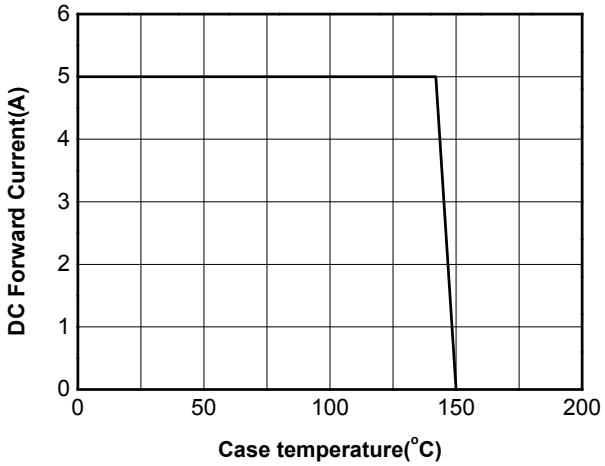
Typical characteristics (Ta=25°C, Per diode)



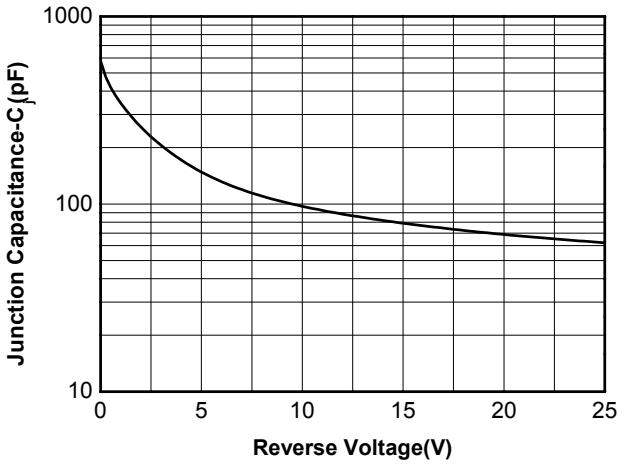
Forward voltage vs. Forward current



Reverse current vs. Reverse voltage



Forward Current Derating Curve



Junction capacitance vs. Reverse voltage

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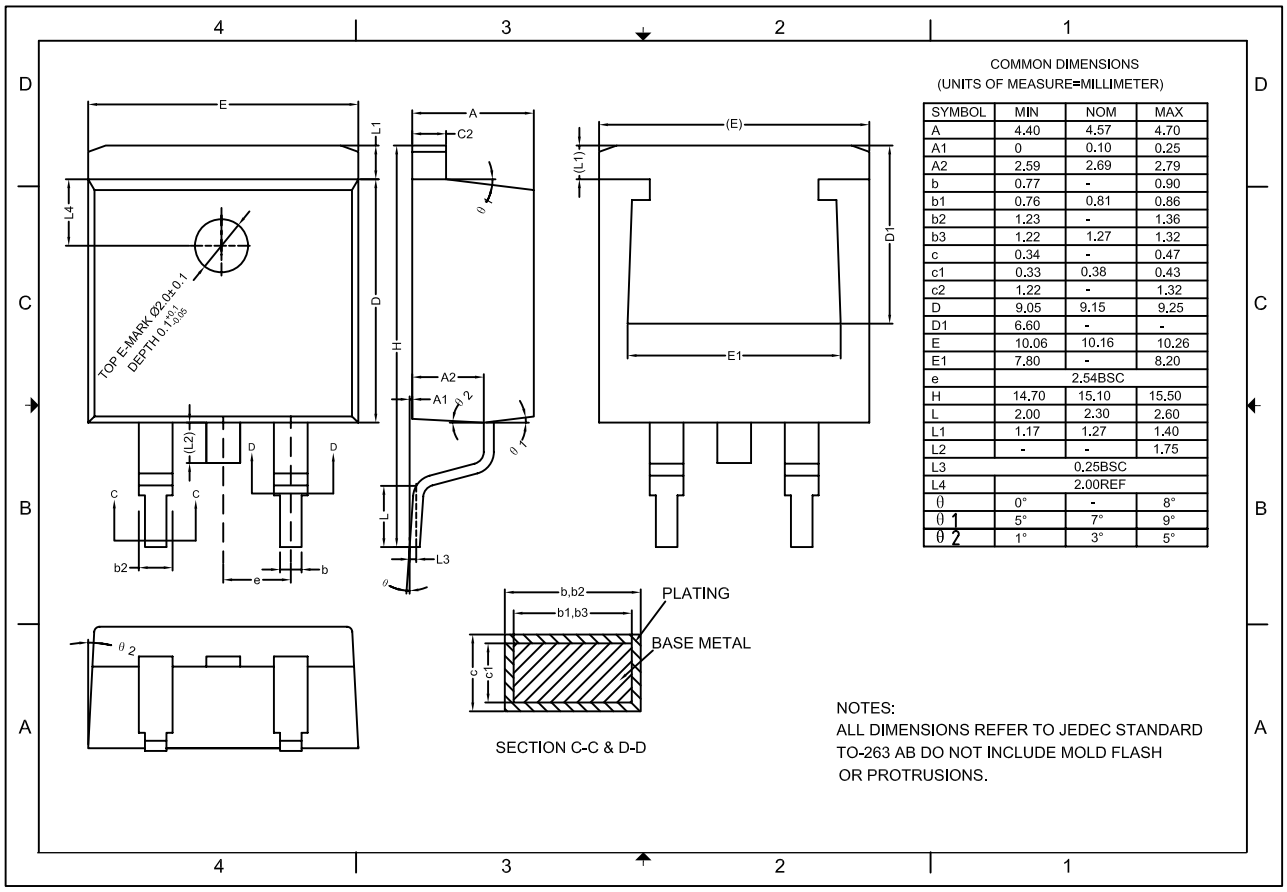
COMMON DIMENSIONS
(UNITS OF MEASURE=MILLIMETER)
SYMBOL | MIN | NOM | MAX
A | 4.40 | 4.57 | 4.70
A1 | 0 | 0.10 | 0.25
A2 | 2.59 | 2.69 | 2.79
b | 0.77 | - | 0.90
b1 | 0.76 | 0.81 | 0.86
b2 | 1.23 | - | 1.36
b3 | 1.22 | 1.27 | 1.32
c | 0.34 | - | 0.47
c1 | 0.33 | 0.38 | 0.43
c2 | 1.22 | - | 1.32
D | 9.05 | 9.15 | 9.25
D1 | 6.60 | - | -
E | 10.06 | 10.16 | 10.26
E1 | 7.80 | - | 8.20
e | 2.54BSC
H | 14.70 | 15.10 | 15.50
L | 2.00 | 2.30 | 2.60
L1 | 1.17 | 1.27 | 1.40
L2 | - | - | 1.75
L3 | 0.25BSC
L4 | 2.00REF
θ | 0° | - | 8°
θ1 | 5° | 7° | 9°
θ2 | 1° | 3° | 5°
TOP E-MARK Ø2.0±0.1
DEPTH 0.1 +0.1 -0.05
PLATING
BASE METAL
SECTION C-C & D-D
NOTES:
ALL DIMENSIONS REFER TO JEDEC STANDARD TO-263 AB DO NOT INCLUDE MOLD FLASH OR PROTRUSIONS.