SBT1545LS

UITRA LOW VF SCHOTTKY RECTIFIER

VOLTAGE 45 Volts **CURRENT** 15 Amperes

FEATURES

- Ultra Low forward voltage drop, low power losses
- High efficiency operation
- Lead free in comply with EU RoHS 2011/65/EU directives

MECHANICAL DATA

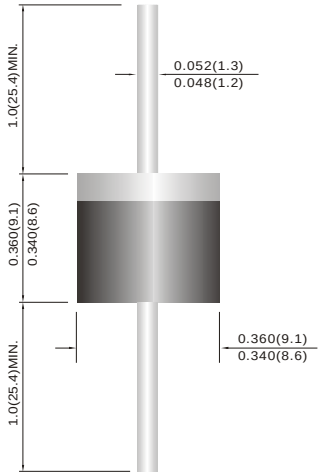
Case : P-600 molded plastic

Terminals : Axial leads,solderable per MIL-STD-750, Method 2026

Polarity : Color band denotes cathode end

Weight: 0.0719 ounces, 2.04 grams.

P-600 Unit : inch(mm)



MAXIMUM RATINGS(T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	45	V
Maximum rms voltage	V_{RMS}	32	V
Maximum dc blocking voltage	V_R	45	V
Maximum average forward rectified current	$I_{F(AV)}$	15	A
Peak forward surge current : 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	275	A
Typical thermal resistance (Note 1)	$R_{\Theta JA}$ $R_{\Theta JL}$	30 12	°C/W
Operating junction temperature range	T_J	-55 to + 150	°C
Storage temperature range	T_{STG}	-55 to + 150	°C

Note : 1. Thermal Resistance from Junction to Ambient and from Junction to lead length 0.375"(9.5mm) P.C.B. mounted

ELECTRICAL CHARACTERISTICS(T_A=25°C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN.	TYP.	MAX.	UNIT
Breakdown voltage	V_{BR}	I_R=0.5mA	45	-	-	V
Instantaneous forward voltage	V_F	I_F=5A, T_J=25°C	-	0.34	-	V
		I_F=10A, T_J=25°C	-	0.38	-	
		I_F=15A, T_J=25°C	-	0.41	0.46	
		I_F=5A, T_J=125°C	-	0.23	-	V
		I_F=10A, T_J=125°C	-	0.3	-	
		I_F=15A, T_J=125°C	-	0.35	-	
Reverse current	I_R	V_R=36V	-	105	-	μA
		V_R=45V, T_J=25°C	-	-	310	μA
		V_R=45V, T_J=125°C	-	60	-	mA

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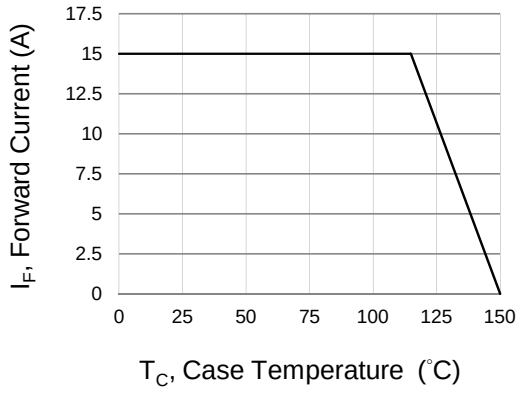

Fig.1 Forward Current Derating Curve

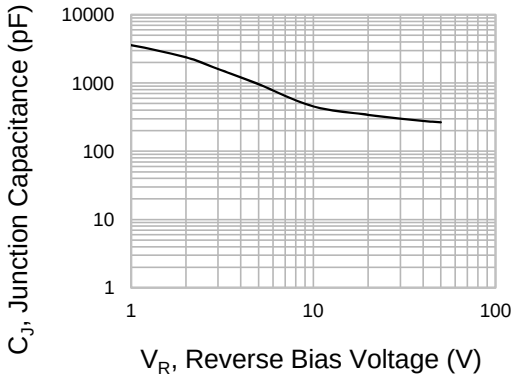

Fig.2 Typical Junction Capacitance

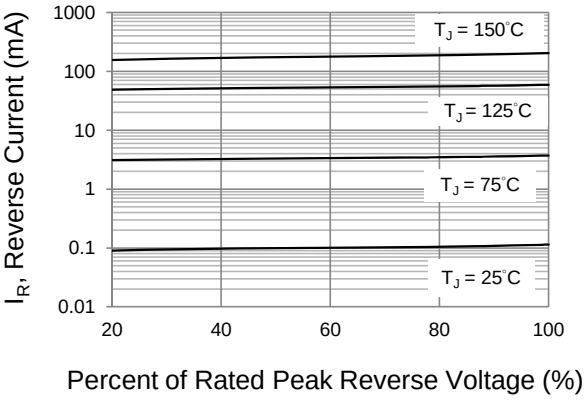

Fig.3 Typical Reverse Characteristics

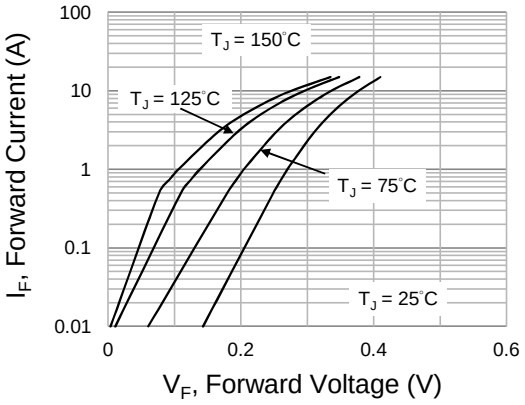

Fig.4 Typical Forward Characteristics

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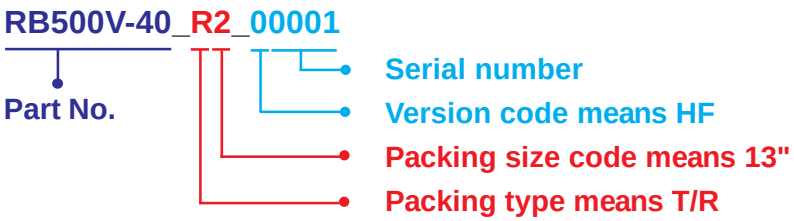
Part No_packing code_Version

SBT1545LS_AY_00001
SBT1545LS_AY_10001
SBT1545LS_B0_00001
SBT1545LS_B0_10001
SBT1545LS_R2_00001
SBT1545LS_R2_10001

For example :



Packing Code XX				Version Code XXXXX		
Packing type	1st Code	Packing size code	2nd Code	HF or RoHS	1st Code	2nd~5th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			

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