



#### LOW VF SCHOTTKY RECTIFIER

VOLTAGE40 VoltsCURRENT40 Amperes

#### **FEATURES**

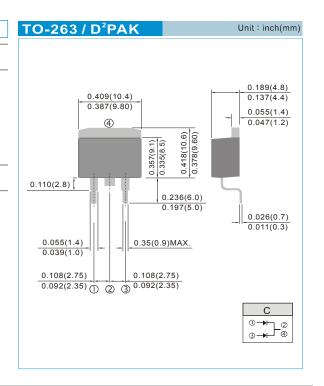
- · Low forward voltage drop, low power losses
- · High efficiency operation
- · Lead free in comply with EU RoHS 2011/65/EU directives

#### **MECHANICAL DATA**

· Case: TO-263/D2PAK, Plastic

• Terminals : Solderable per MIL-STD-750, Method 2026

• Weight: 0.0514 ounces, 1.46 grams



#### MAXIMUM RATINGS (TA=25°C unless otherwise noted)

PARAMETER			VALUE	UNIT
Maximum repetitive peak reverse voltage		VRRM	40	V
Maximum average forward rectified current	per device per diode	l f(AV)	40 20	Α
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load	per diode	İFSM	250	Α
Typical thermal resistance ( Note )		R⊚JC	3.3	°C/W
Operating junction and storage temperature range		ТJ, Tsтg	-55 to + 150	°C

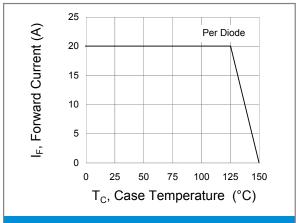
#### ELECTRICAL CHARACTERISTICS (TA=25°C unless otherwise noted)

PARAMETER	SYMBOL	TEST CONDITIONS		MIN.	TYP.	MAX.	UNIT
Breakdown voltage	VBR	I R=1mA		40	-	-	V
Instantaneous forward voltage per diode	VF	IF= 5A IF=10A IF=20A	TJ=25°C	- - -	0.37 0.41 0.47	- - 0.50	V
		I F= 5A I F=10A I F=20A	T <sub>J</sub> =125°C		0.25 0.31 0.39	- - 0.42	V
Reverse current per diode	l R	V <sub>R</sub> =32V	TJ=25°C	-	126	-	μΑ
		V <sub>R</sub> =40V	TJ=25°C TJ=125°C	-	270 140	400 560	μA mA

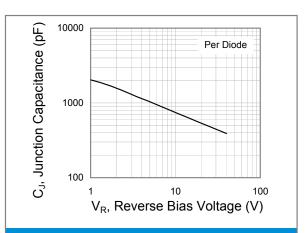
Note: Semi-infinite heatsink.



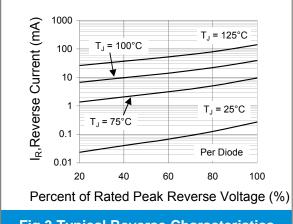




**Fig.1 Forward Current Derating Curve** 



**Fig.2 Typical Junction Capacitance** 



**Fig.3 Typical Reverse Characteristics** 

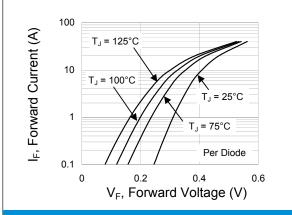
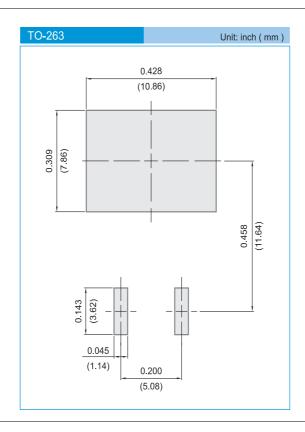


Fig.4 Typical Forward Characteristics





#### **MOUNTING PAD LAYOUT**



#### **ORDER INFORMATION**

• Packing information

T/R - 0.8K per 13" plastic Reel





### Part No\_packing code\_Version

SB4040LDC\_R2\_00001 SB4040LDC\_R2\_10001

## For example :



Packing Code XX			Version Code XXXXX			
Packing type	1 <sup>st</sup> Code	Packing size code	2 <sup>nd</sup> Code	HF or RoHS	1 <sup>st</sup> Code	2 <sup>nd</sup> ~5 <sup>th</sup> Code
Tape and Ammunition Box (T/B)	Α	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	В	13"	2			
Tube Packing (T/P)	Т	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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