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January 2010

BAT42XV2-BAT43XV2 **Schottky Barrier Diodes**

Features

- Low Forward Voltage Drop
- Flat Lead, Surface Mount Device at 0.60mm Height
- Extremely Small Outline Plastic Package SOD523F
- · Moisture Level Sensitivity 1
- · Pb-free Version and RoHS Compliant
- Matte Tin (Sn) Lead Finish
- · Green Mold Compound



ELECTRICAL SYMBOL



BAT42XV2 Marking: 6B BAT43XV2 Marking: 7B

Band Indicates Cathode

Absolute Maximum Ratings * T_A=25°C unless otherwise noted

Symbol	Parameter	Value	Units
V_{RRM}	Maximum Repetitive Reverse Voltage	30	V
V _R	Maximum DC Blocking Voltage	30	V
I _{F(AV)}	Average Rectified Forward Current	200	mA
I _{FSM}	Peak Forward Surge Current	4	А
TJ	Operating Junction Temperature	+125	°C
T _{STG}	Storage Temperature Range	-65 to +125	°C

^{*} These ratings are limiting values above which the serviceability of any semiconductor device may be impaired.

Thermal Characteristics T_A=25°C unless otherwise noted

Symbol	Parameter	Value	Units
P_{D}	Power Dissipation	200	mW
$R_{\theta JA}$	Thermal Resistance, Junction to Ambient	500	°C/W

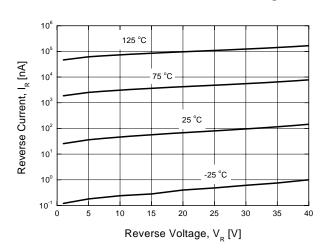
^{*} Device mounted on FR-4 PCB minimum land pad.

Electrical Characteristics T_A=25°C unless otherwise noted

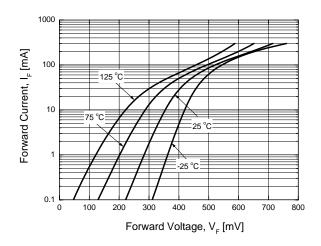
Symbol	Parameter	Test Condition	Min.	Тур.	Max.	Units
BV _R	Breakdown Voltage	I _R =100μA	30			V
I _R	Reverse Leakage Current	V _R =25V			500	nA
V _F	Forward Voltage BAT42XV2	I _F =10mA			0.40	
		I _F =50mA			0.65	
	BAT43XV2		0.26		0.33	V
		I _F =15mA			0.45	
	BAT42XV2, BAT43XV2	I _F =200mA			1.0	
T _{RR}	Reverse Recovery Time	I _F =I _R =10mA		5		nS
		$R_L=100\Omega$				
		I _{RR} =1mA				
С	Capacitance	V _R =1V, f=1MHz		7		pF

Typical Performance Characteristics

Reverse Current vs Reverse Voltage

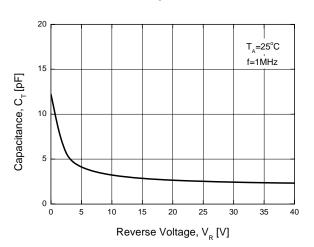


Forward Voltage vs Forward Current

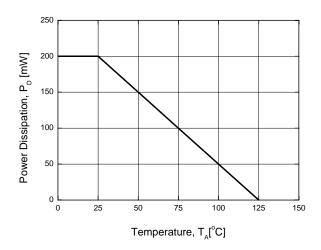


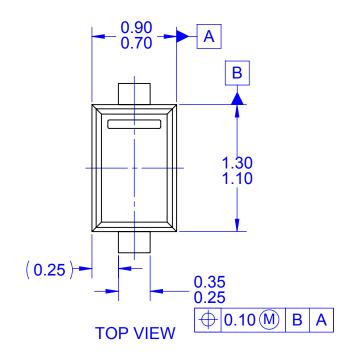
Typical Performance Characteristics (Continued)

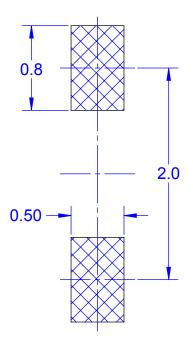
Total Capacitance



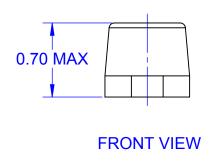
Power Derating Curve

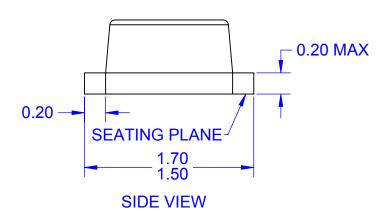






LAND PATTERN RECOMMENDATION





NOTES:

- A. CONFORMS TO JEITA SC-79
- B. ALL DIMENSIONS ARE IN MILLIMETERS
- C. DRAWING CONFORMS TO ASME Y14.5M-2009 D. DIMENSIONS ARE EXCLUSIVE OF BURRS, MOLD FLASH, AND TIE BAR PROTRUSIONS
- E. LAND PATTERN RECOMMENDATION IS BASED ON
- IPC7351A STANDARD SOD1609X65M F. DRAWING FILENAME: MKT-SOD523F1rev2



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BAT43XV2

ПОСТАВКА ЭЛЕКТРОННЫХ КОМПОНЕНТОВ

многоканальный

Общество с ограниченной ответственностью «МосЧип» ИНН 7719860671 / КПП 771901001 Адрес: 105318, г.Москва, ул.Щербаковская д.3, офис 1107

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