



Features

- Average Forward Current: $I_{F(AV)}=2A$
- Polarity: Color band denotes cathode



SMB



Ordering Information

Product ID	Pack	Marking	Qty(PCS)
VSSB420S-M3/5BT	SMA	V42UD	3000

Maximum Ratings (Ta=25°C unless otherwise noted)

Item	Symbol	Unit	Test Conditions	Limit
Repetitive Peak Reverse Voltage	V_{RRM}	V		200
Maximum RMS Voltage	V_{RMS}	V		140
Average Forward Current	$I_{F(AV)}$	A	60Hz Half-sine wave Resistance load , FIG.1	2.0
Surge(Non-repetitive)Forward Current	I_{FSM}	A	60Hz Half-sine wave , 1 cycle , Ta=25°C	50
Junction Temperature	T_J	°C		-55~+150
Storage Temperature	T_{STG}	°C		-55 ~ +150

Electrical Characteristics (Ta=25°C unless otherwise specified)

Item	Symbol	Unit	Test Condition	Limit
Peak Forward Voltage	V_F	V	$I_F=2.0A$	0.95
Peak Reverse Current	I_{RRM1}	mA	$V_{RM}=V_{RRM}$	$T_a=25^{\circ}C$ 0.1
	I_{RRM2}			$T_a=100^{\circ}C$ 5.0
Thermal Resistance(Typical)	$R_{\theta J-A}$	°C/ W	Between junction and ambient	75
	$R_{\theta J-L}$		Between junction and terminal	17

Notes:

Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.2" x 0.2" (5.0 mm x 5.0 mm) copper pad areas



Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

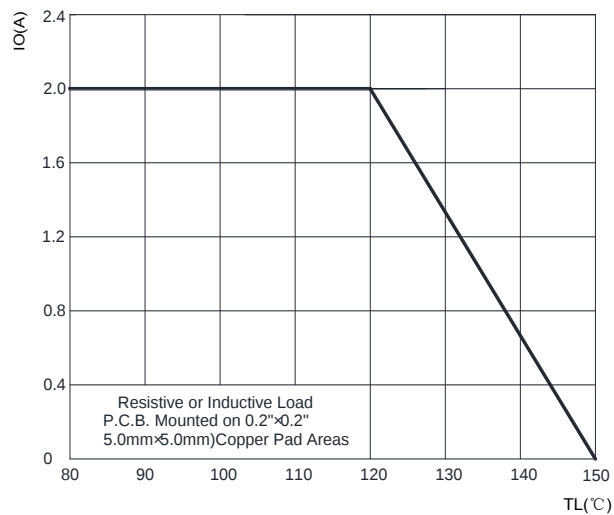


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

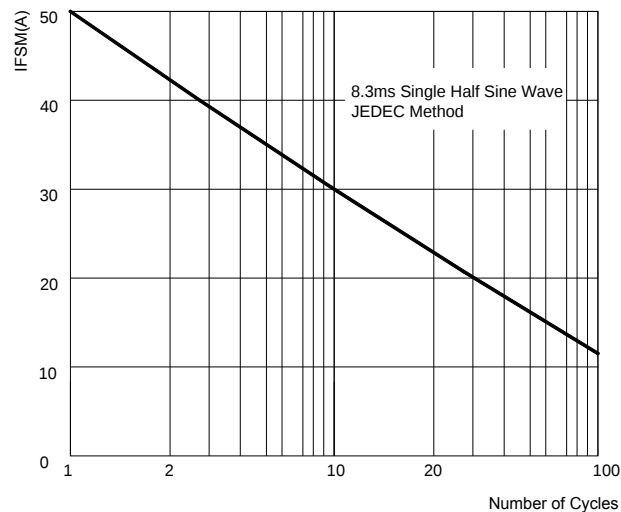


FIG.3: TYPICAL FORWARD CHARACTERISTICS

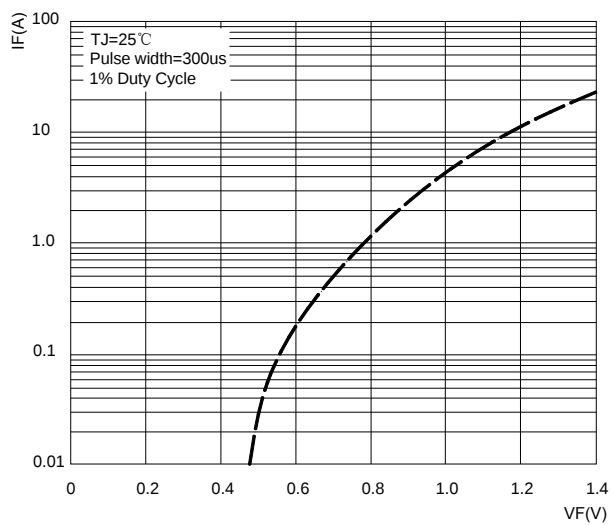
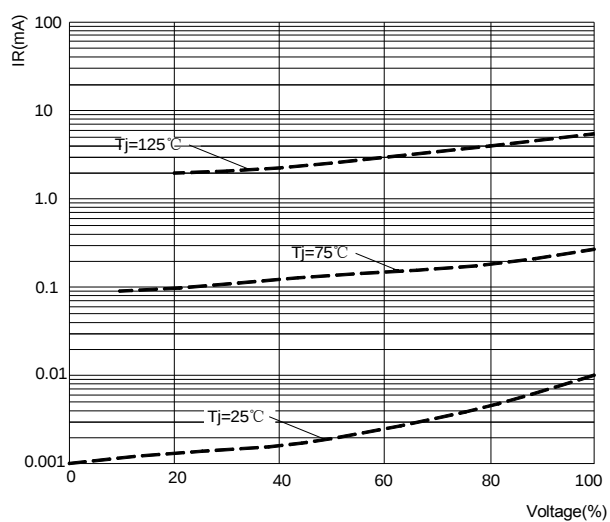
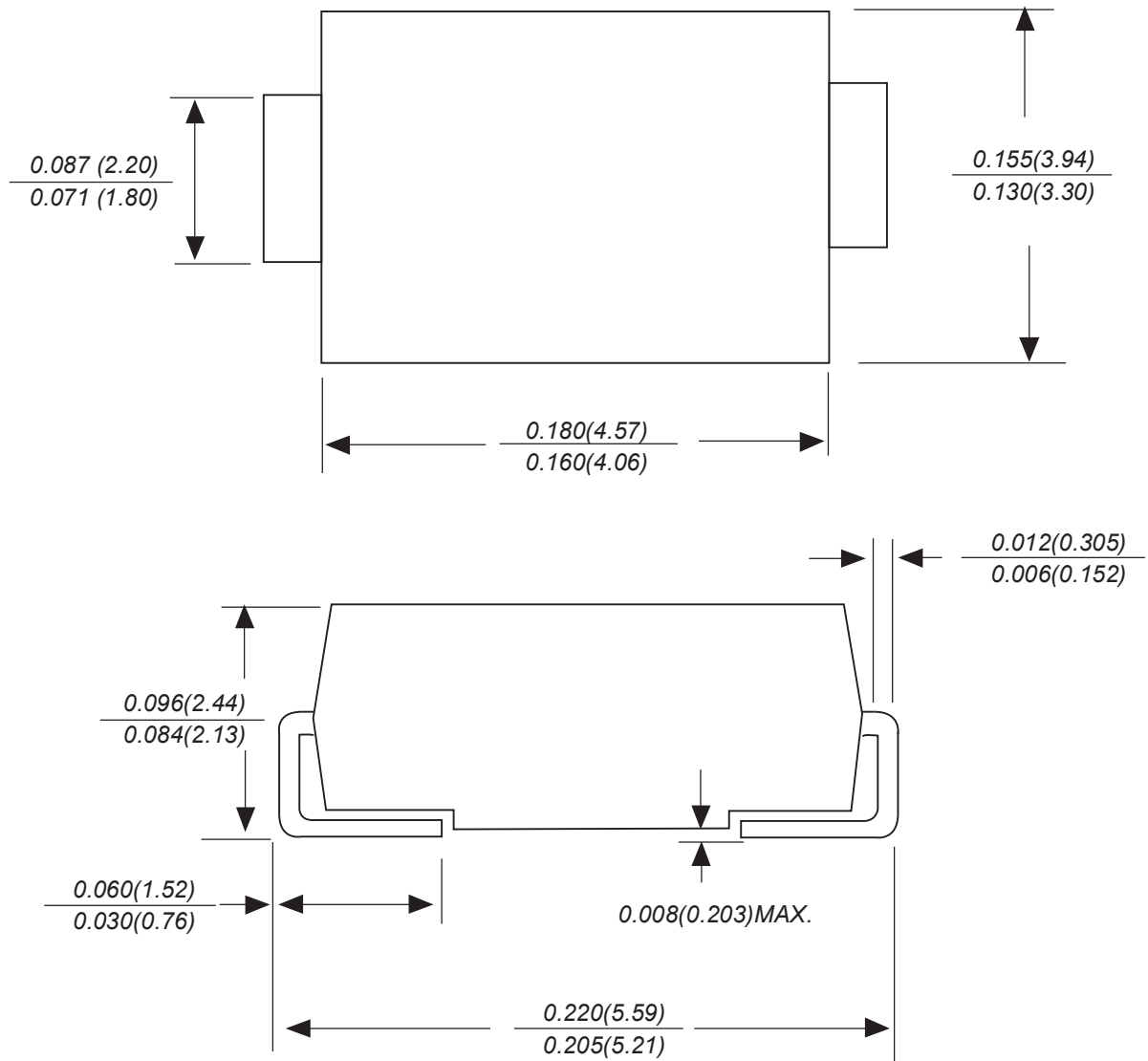


FIG.4: TYPICAL REVERSE CHARACTERISTICS





SMB Package Outline Dimensions



Dimensions in inches and (millimeters)



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