



Features

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



SMB



Ordering Information

Product ID	Pack	Brand	Qty(PCS)
USB260-M3/5BT	SMB	HXY MOSFET	3000

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

Item	Symbol	Test Conditions	Limit	Unit
Repetitive Peak Reverse Voltage	V_{RRM}		600	V
Maximum RMS Voltage	V_{RMS}		420	V
Average Forward Current	$I_{F(AV)}$	60Hz Half-sine wave, Resistance load, Ta=110 °C	2.0	A
Surge(Non-repetitive)Forward Current	I_{FSM}	60Hz Half-sine wave, 1 cycle, Ta=25 °C	50	A
Operation Junction and Storage Temperature Range	T_J, T_{STG}		-55 ~ +150	°C

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

Item	Symbol	Test Condition	Limit	Unit
Peak Forward Voltage	V_F	$I_F=2.0A$	1.7	V
Maximum reverse recovery time	t_{rr}	$I_F=0.5A, I_R=1.0A, I_{rr}=0.25A$	35	ns
Peak Reverse Current	I_{RRM1}	$V_{RM}=V_{RRM}$	Ta=25°C	μA
	I_{RRM2}		Ta=125°C	
Thermal Resistance(Typical)	$R_{\theta J-A}$	Between junction and ambient	65	°C/W
	$R_{\theta J-L}$	Between junction and terminal	18	
Juction Capacitance (Typical)	C_j	Measured at 1MHZ and Applied Reverse Voltage of 4.0 V.D.C	20	pF

Notes:

Thermal resistance from junction to ambient and from junction to lead mounted on P.C.B. with 0.27 x 0.27 (7.0 mm x 7.0 mm) copper pad areas



Typical Characteristics

Fig.1: Forward Current Derating Curve

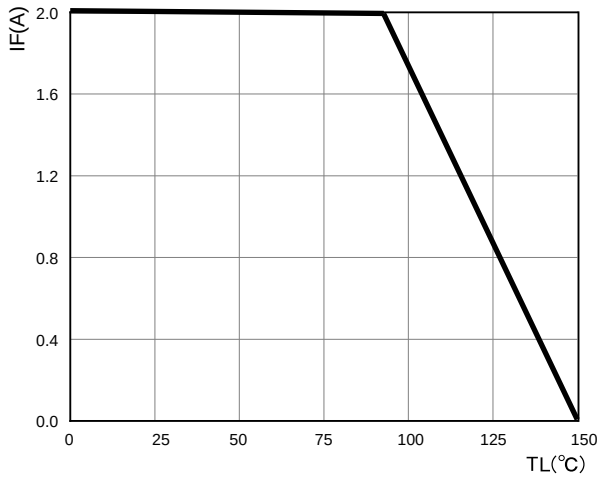


Fig.2: Maximum Non-repetitive Forward Surge Current

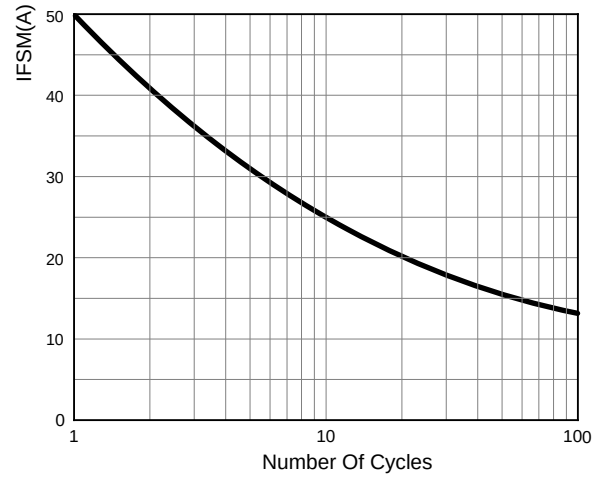


Fig.3 : Typical Forward Characteristics

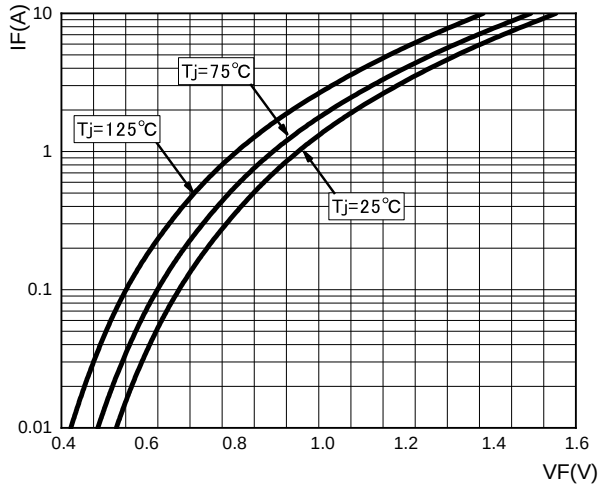
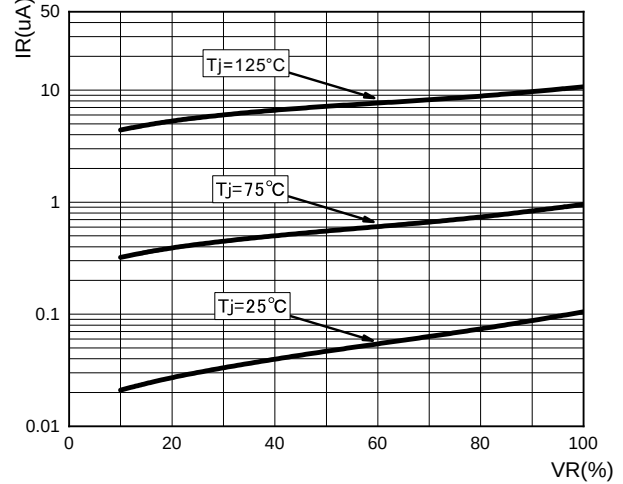


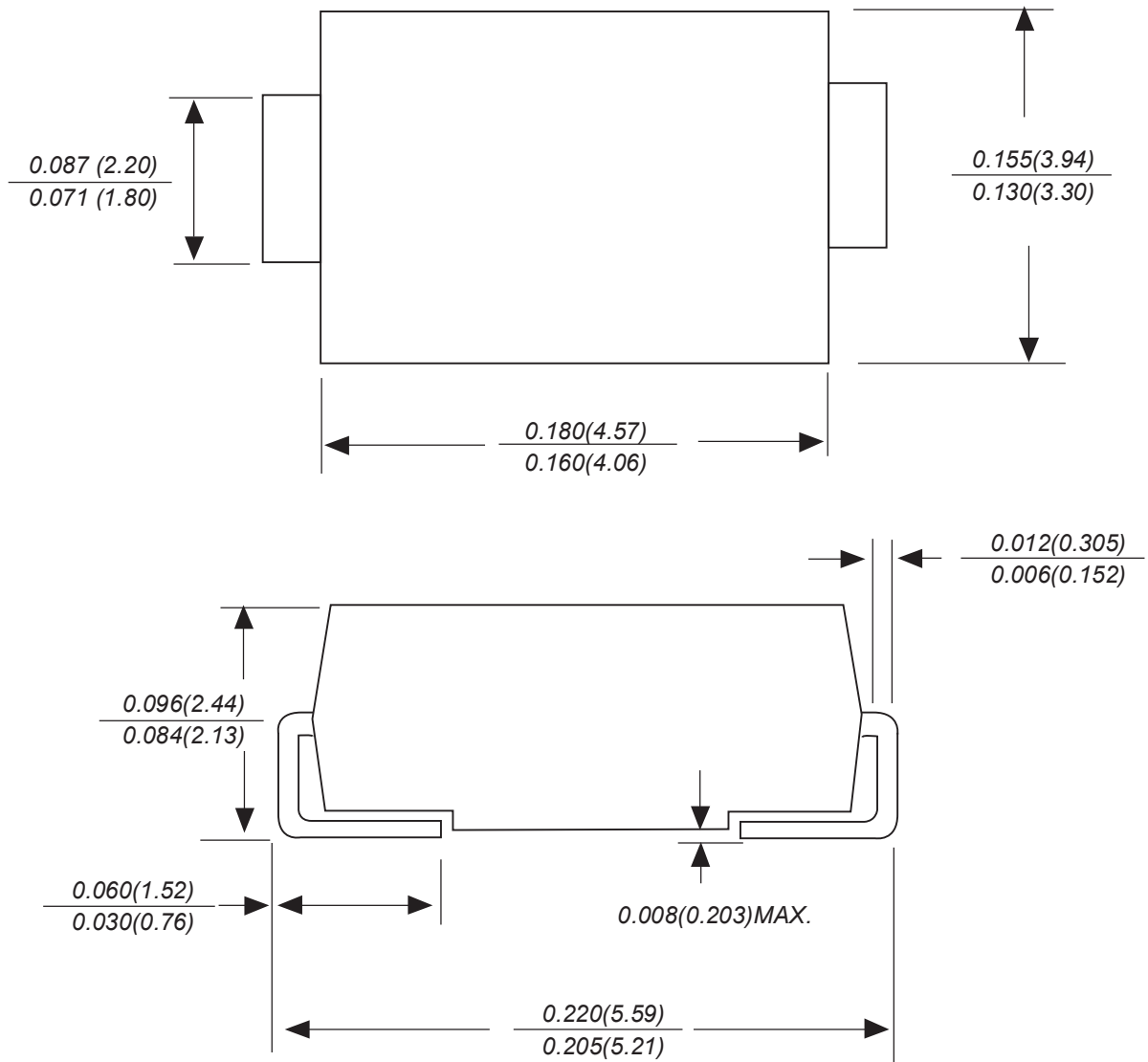
Fig.4: Typical Reverse Characteristics





Package Outline Dimensions

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Dimensions in inches and (millimeters)



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