

PRIMARY CHARACTERISTICS

P_D	250mW
V_R	240V
I_O	200mA
$T_{J,Max}$	150°C

FEATURES

- MMSD2004S type is a silicon switching dual in series diode manufactured by the epitaxial planar process, designed for applications requiring high voltage capability. Power dissipation
- Moisture Sensitivity Level 1

Maximum Ratings @Ta=25°C

Parameter	Symbol	Limit	Unit
Non-Repetitive Peak reverse voltage	V_{RM}	300	V
DC Blocking Voltage	V_R	240	V
Average Repetitive Output Current	I_O	200	mA
Continuous Forward Current	I_F	225	mA
Peak Repetitive Forward Current	I_{FRM}	625	mA
Non-Repetitive Peak Forward Surge Current @t=8.3ms	I_{FSM}	2.5	A
Power Dissipation	P_D	250	mW
Thermal Resistance From Junction to Ambient	$R_{\theta JA}$	500	°C/W
Junction temperature	T_J	150	°C
Storage temperature range	T_{STG}	-55~+150	°C

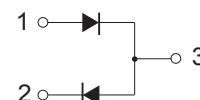
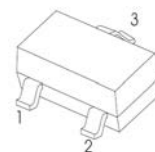
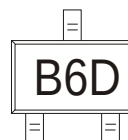
ELECTRICAL CHARACTERISTICS (Ta=25°C unless otherwise specified)

Parameter	Symbol	Test conditions	Min	Max	Unit
Reverse breakdown voltage	$V_{(BR)}$	$I_R = 100\mu A$	240		V
Reverse voltage leakage current	I_R	$V_R = 240V$		0.1	mA
Forward voltage	V_F	$I_F = 100mA$		1	V
Diode capacitance	C_D	$V_R = 0V, f = 1MHz$		5	pF
Reveres recovery time	t_{rr}	$I_F = I_R = 30mA, R_L = 100\Omega$		50	ns

SOT-323

PACKAGE

Marking : B6D

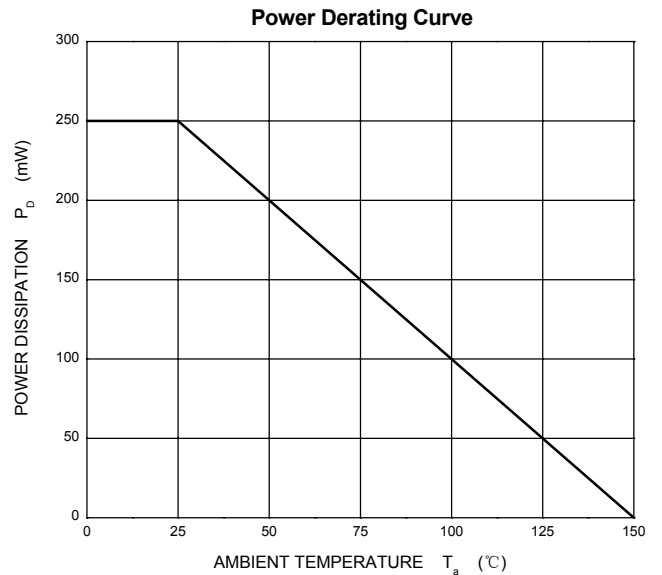
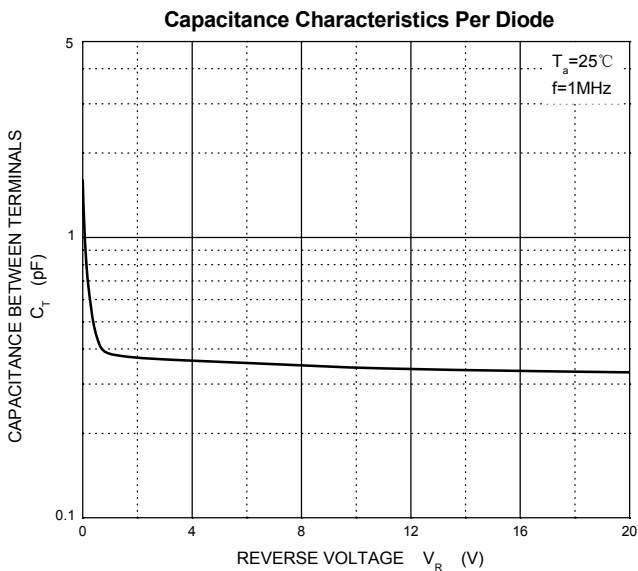
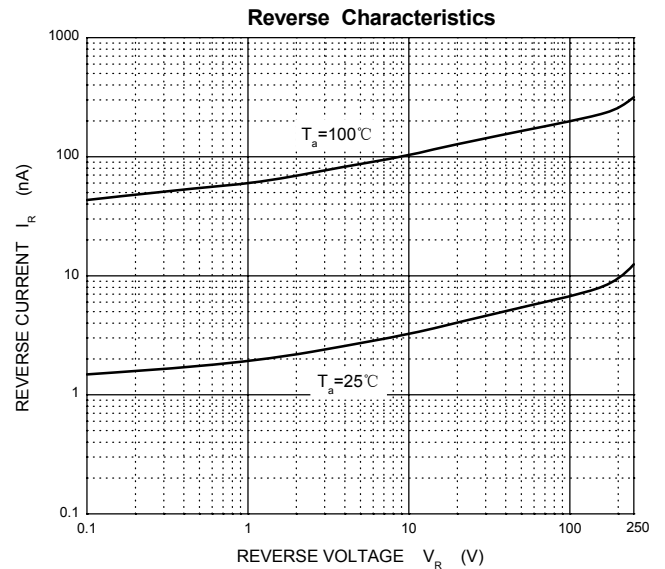
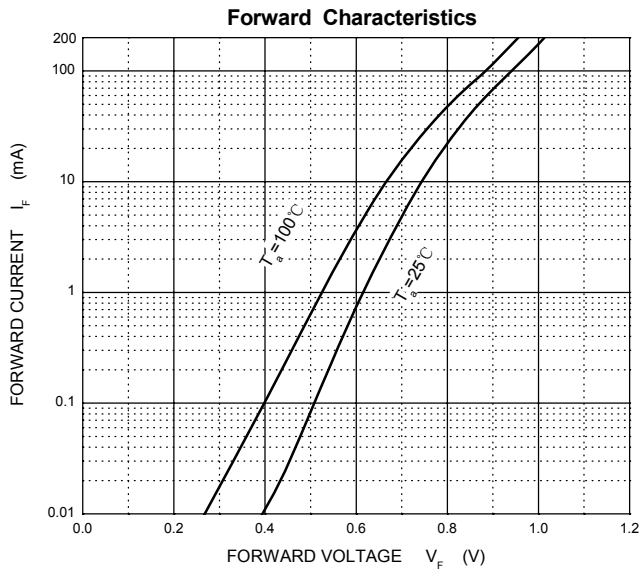


MECHANICAL DATA

- Case : Molded plastic, SOT-323
- Polarity : Shown above
- Terminals : Plated terminals, solderable per MIL-STD-750, Method 2026
- Epoxy : UL94-V0 rated flame retardant



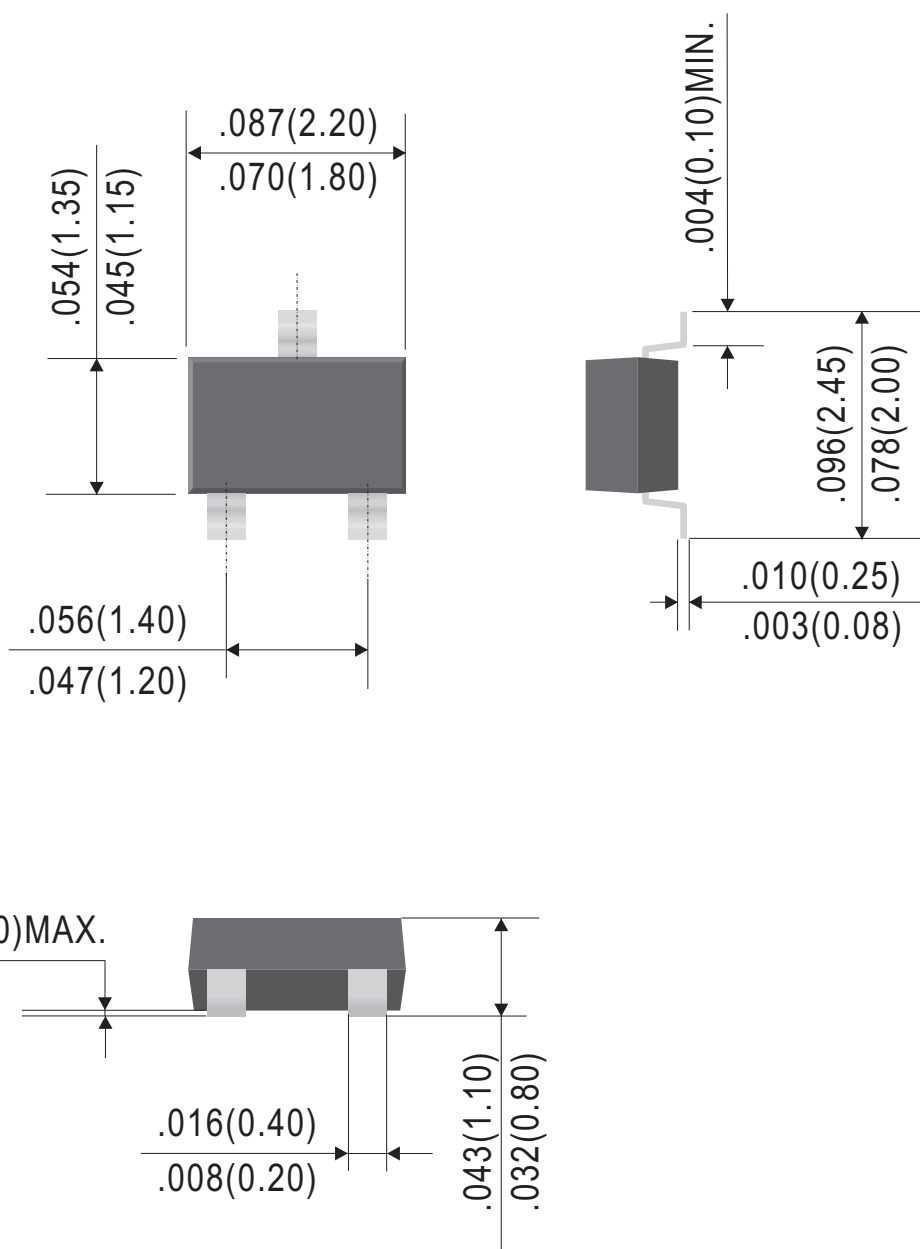
Typical Characteristics





Outline Drawing

SOT-323



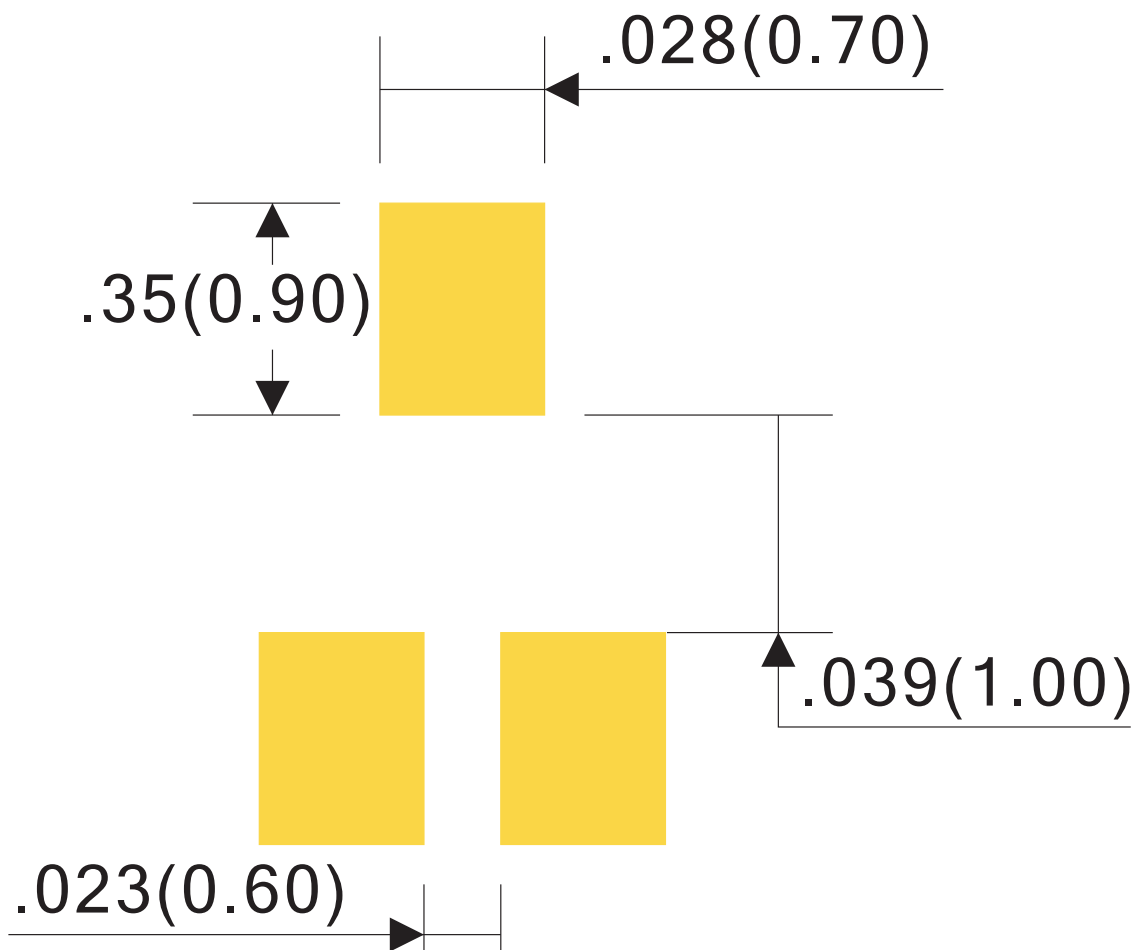
Dimensions in inches and (millimeters)

Rev.D



Suggested Soldering Pad Layout

SOT-323



Dimensions in inches and (millimeters)

RevA

Ordering Information:

Device PN	Packing
MMSD2004S -T ⁽¹⁾ G ⁽²⁾ -WS	Tape&Reel: 3 Kpcs/Reel

Note: (1) Packing code, Tape & Reel Packing

(2) RoHS product for packing code suffix "G" ; Halogen free product for packing code suffix "H"

Disclaimer

WILLAS reserves the right to make changes without notice to any product specification herein, to make corrections, modifications, enhancements or other changes. WILLAS or anyone on its behalf assumes no responsibility or liability for any errors or inaccuracies. Data sheet specifications and its information contained are intended to provide a product description only. "Typical" parameters which may be included on WILLAS data sheets and/ or specifications can and do vary in different applications and actual performance may vary over time. WILLAS does not assume any liability arising out of the application or use of any product or circuit.

This is the preliminary specification. WILLAS products are not designed, intended or authorized for use in medical, life-saving implant or other applications intended for life-sustaining or other related applications where a failure or malfunction of component or circuitry may directly or indirectly cause injury or threaten a life without expressed written approval of WILLAS. Customers using or selling WILLAS components for use in such applications do so at their own risk and shall agree to fully indemnify WILLAS Inc and its subsidiaries harmless against all claims, damages and expenditures.