

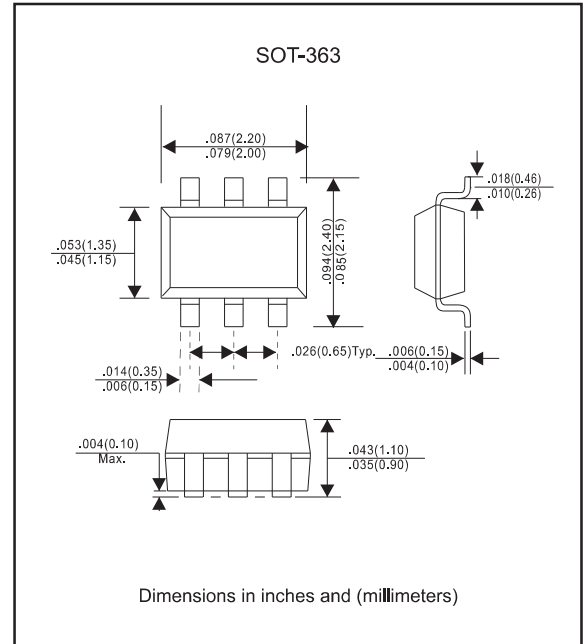
Features

- Fast speed switching.
- For general purpose switching application.
- High conductance.
- Easily connected as full wave bridge
- Silicon epitaxial planar chip.
- Lead-free parts meet RoHS requirements.
- Compliant to Halogen-free
- Suffix "-Q1" for AEC-Q101

Mechanical data

- Epoxy:UL94-V0 rated flame retardant
- Case : Molded plastic, SOT-363
- Terminals : Solder plated, solderable per MIL-STD-750, Method 2026
- Mounting Position : Any

Package outline



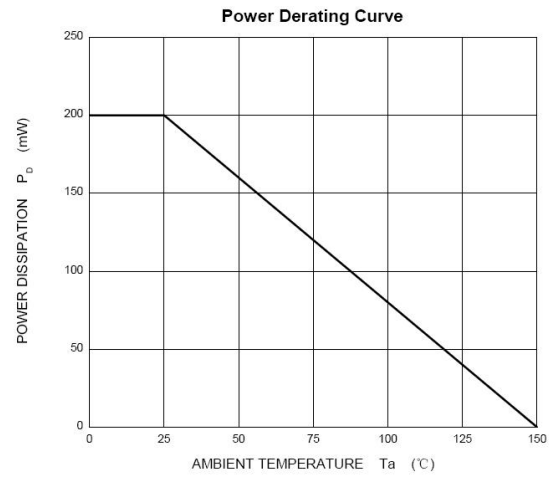
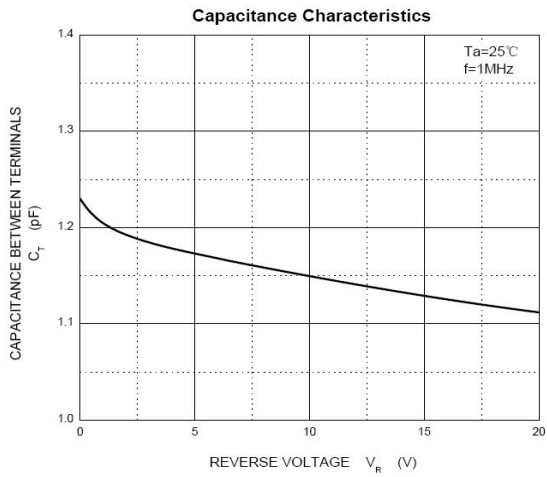
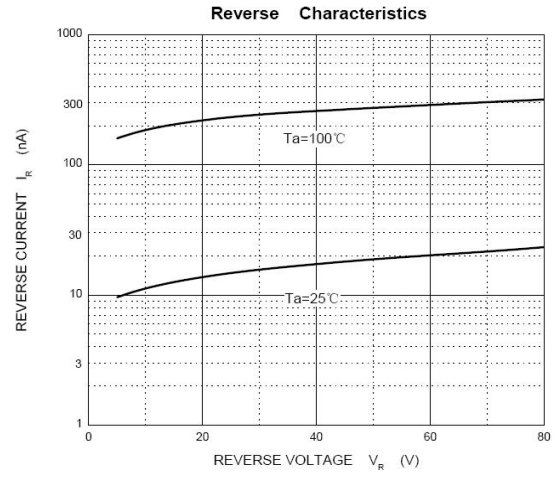
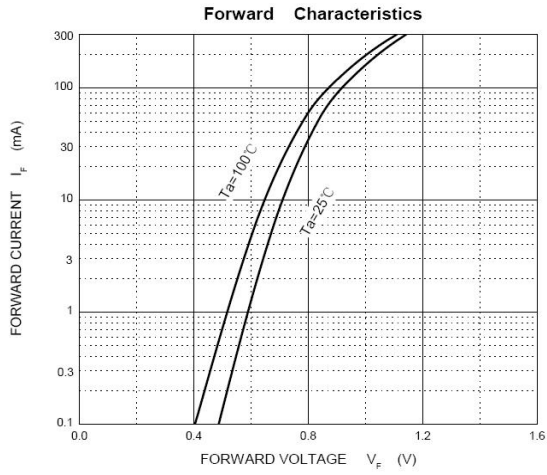
Maximum ratings (AT $T_A=25^\circ\text{C}$ unless otherwise noted)

PARAMETER	Symbol	Limit	UNIT
Reverse voltage	V_R	75	V
Average rectified output current	I_O	150	mA
Non-repetitive peak forward surge current 8.3ms	I_{FSM}	2.0	A
Typical thermal resistance junction to ambient	$R_{\theta JA}$	625	$^\circ\text{C}/\text{W}$
Power dissipation	P_D	200	mW
Operating junction temperature range	T_J	-55 to +150	$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 to +150	$^\circ\text{C}$

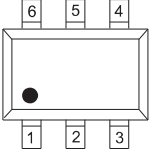
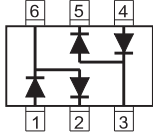
Electrical characteristics (AT $T_A=25^\circ\text{C}$ unless otherwise noted)

PARAMETER	Symbol	Min	Max	UNIT
Reverse breakdown voltage at $I_R = 100 \mu\text{A}$	V_{BR}	75		V
Reverse leakage current at $V_R = 75\text{V}$ at $V_R = 20\text{V}$	I_R		2.5	μA
			25	nA
Total capacitance, $V_R = 0\text{V}$, $f = 1.0\text{MHz}$	C_D		2.0	pF
Reverse recovery time, $I_F = I_R = 10\text{mA}$, $I_{RR} = 0.1 \times I_R$, $R_L = 100\Omega$	t_{rr}		4.0	ns
Forward voltage at $I_F = 1.0\text{mA}$ at $I_F = 10\text{mA}$ at $I_F = 50\text{mA}$ at $I_F = 150\text{mA}$	V_F		715	mV
			855	
			1000	
			1250	

Rating and characteristic curves for each diode

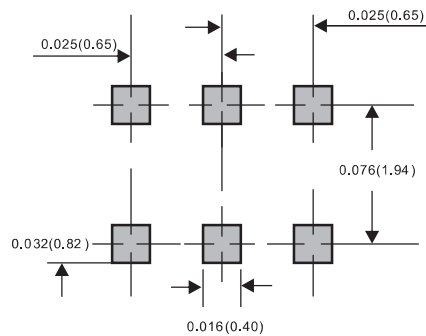


Pinning information

Type number	Marking code	Simplified outline	Symbol
BAV99DW-Q1	KJG		

Suggested solder pad layout

SOT-363



Dimensions in inches and (millimeters)