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SB706D-40

SILICON EPITAXIAL SCHOTTKY BARRIER DIODE

For low current rectification

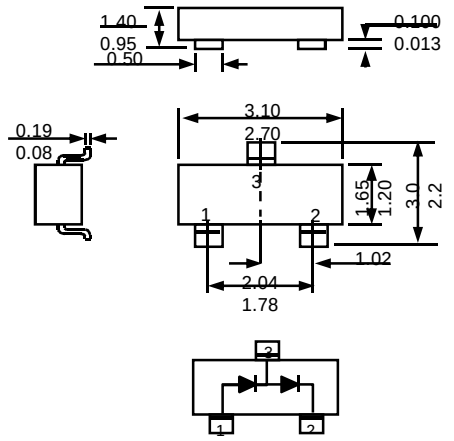
FEATURES :

* High reliability
* Low reverse current
* Pb / RoHS Free

MECHANICAL DATA :

* Case : SOT-23 plastic Case
* Marking Code : ZE

SOT-23



Dimensions in millimeters

ABSOLUTE MAXIMUM RATINGS(1) (Ta = 25 °C)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	45	V
Reverse Voltage	V_R	40	V
Average Rectified Forward Current	$I_{F(AV)}$	30	mA
Peak Forward Surge Current (t = 8.3 ms)	I_{FSM}	200	mA
Junction Temperature	T_J	125	°C
Storage Temperature Range	T_{STG}	-55 to +125	°C

ELECTRICAL CHARACTERISTICS (Ta = 25 °C)

Parameter	Test Condition	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage	I_R = 10µA	$V_{(BR)}$	45	-	-	V
Reverse Current	V_R = 10 V	I_R	-	-	1	µA
Forward Voltage	I_F = 1 mA	V_F	-	-	0.37	V
Diode Capacitance	V_R = 1 V, f = 1 MHz	C_{tot}	-	2	-	pF

RATINGS AND CHARACTERISTIC CURVES (SB706D-40)

FIG.1 - DERATING CURVE

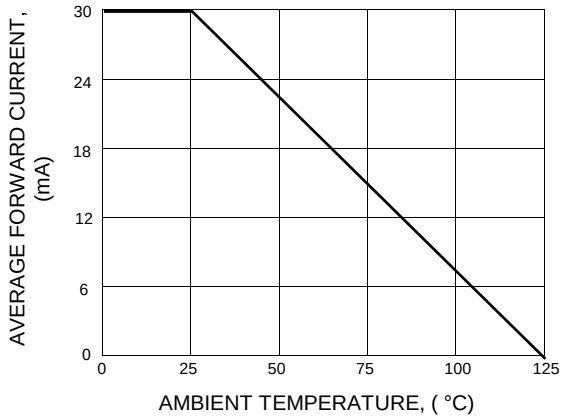


FIG.2 - CAPACITANCE BETWEEN TERMINALS VS. REVERSE VOLTAGE

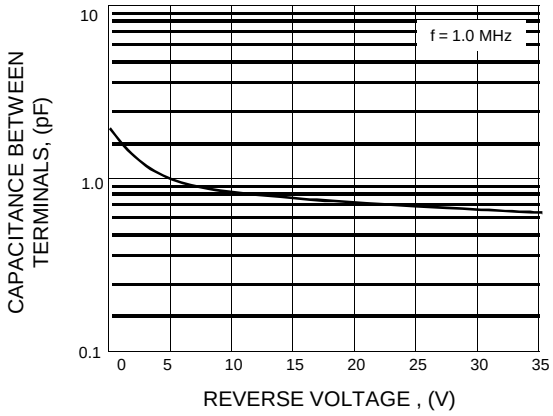


FIG.3 - FORWARD VOLTAGE VS. FORWARD CURRENT

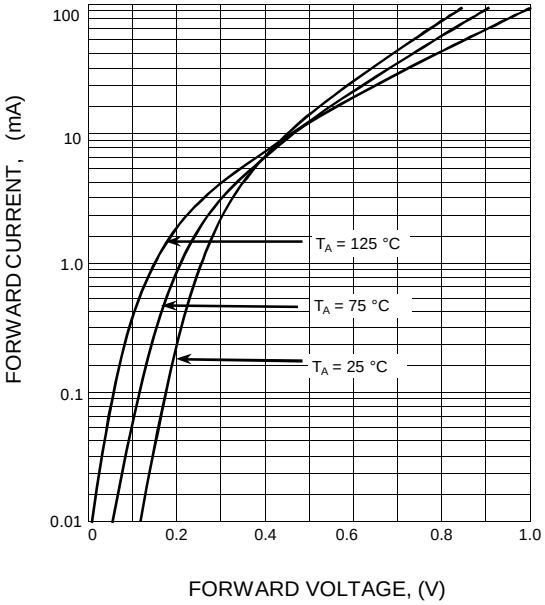


FIG.4 - REVERSE VOLTAGE VS. REVERSE CURRENT