GSBAS40 thru GSBAS40-06

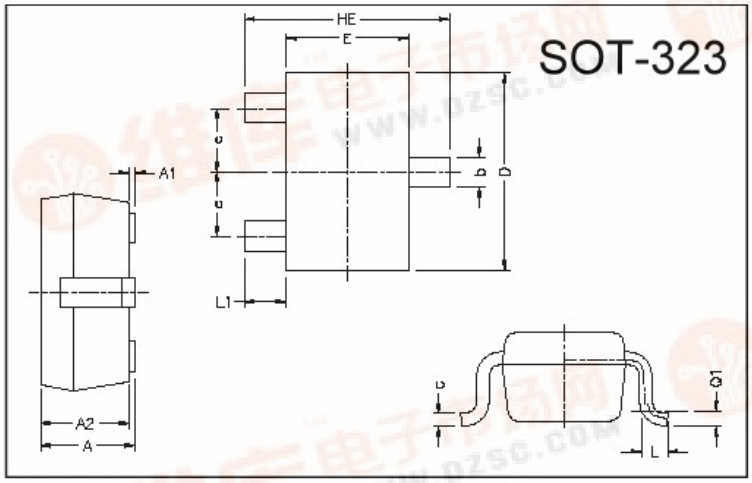
SURFACE MOUNT, SCHOTTKY BARRIER DIODE

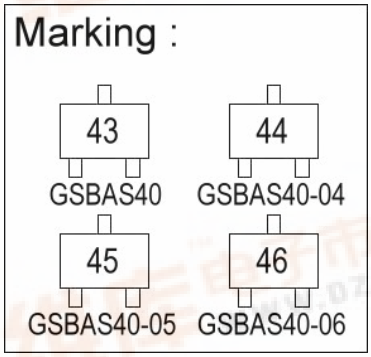
VOLTAGE 40V, CURRENT 0.2A

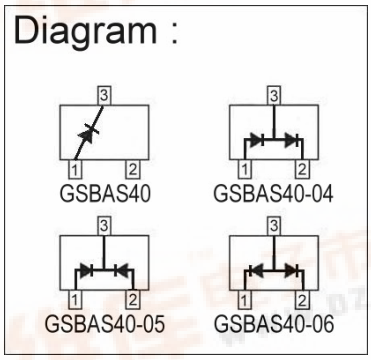
Description

These schottky barrier diodes are designed for high speed switching applications, circuit protection and voltage clamping. Extremely low forward voltage reduces conduction loss. Miniature surface mount package is excellent for hand held and portable applications where space is limited.

Package Dimensions







REF.	Millimeter		REF.	Millimeter	
	Min.	Max.		Min.	Max.
A	0.80	1.10	L1	0.42 REF.	
A1	0	0.10	L	0.15	0.35
A2	0.80	1.00	b	0.25	0.40
D	1.80	2.20	c	0.10	0.25
E	1.15	1.35	e	0.65 REF.	
HE	1.80	2.40	Q1	0.15 BCS.	

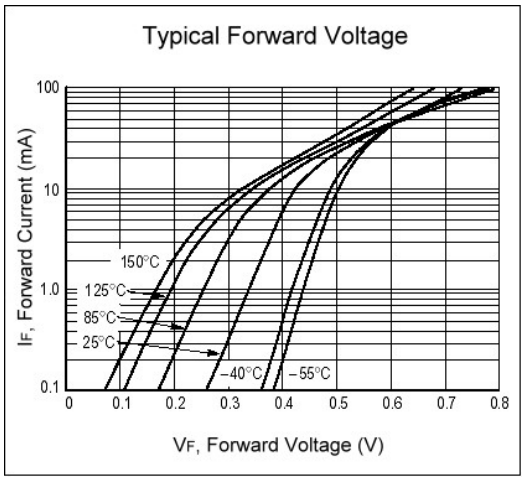
Absolute Maximum Ratings at T_A = 25℃

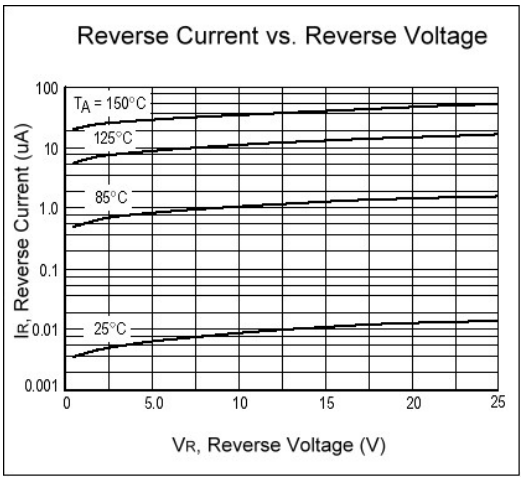
Parameter	Symbol	Ratings	Unit
Operating Junction Temperature	Tj	-55 ~ +125	℃
Storage Temperature	Tstg	-55 ~ +150	℃
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	40	V
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	445	℃/W
Peak Forward Surge Current at tp < 1.0s	I_{FSM}	0.6	A
Maximum Average Forward Rectified Current	Io	0.2	A
Total Power Dissipation	PD	225	mW

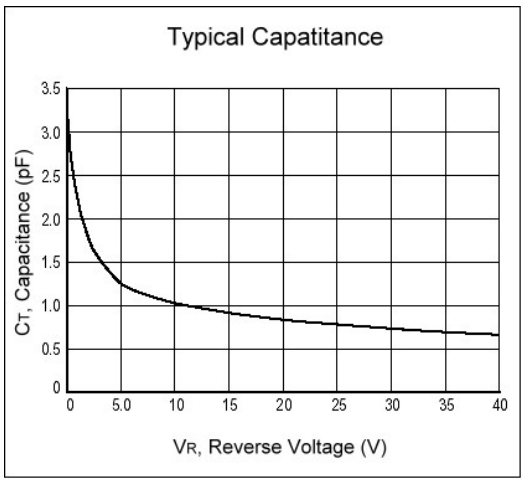
Electrical Characteristics (at T_A = 25℃ unless otherwise noted)

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test Conditions
Reverse Breakdown Voltage	$V_{(BR)R}$	40	-	-	V	IR=10μA
Forward Voltage(tp < 300uS)	V_F	-	-	380	mV	IF1=1mA
		-	-	1000		IF2=40mA
Reverse Leakage Current	I_R	-		200	nA	VR=30V
Total Capacitance	C_T	-	-	5.0	pF	VR=0V, f=1MHz
Reverse Recover Time	T_{rr}	-	-	5.0	ns	IF=IR=10mA, RL=100Ω, Irr=1mA

Characteristics Curve







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