

SMALL SIGNAL SCHOTTKY DIODE

VOLTAGE : 100 V

FEATURES

For general purpose applications

These diodes feature very low turn-on voltage and fast switching. These devices are protected by a PN junction guard ring against excessive voltage, such as electrostatic discharges.

These diodes are also available in the DO-35 case with type designations BAT41 and in the SOD-123 case with type designations BAT41W

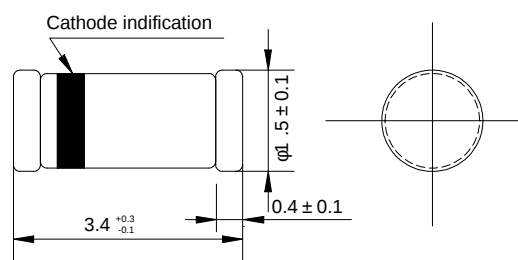
MECHANICAL DATA

Case: MINI-MELF, glass case

Polarity: Color band denotes cathode

Weight: 0.031 grams

MINI-MELF



Dimensions in millimeters

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

MAXIMUM RATINGS

		LL41	UNITS
Peak reverse voltage	V_{RRM}	100	V
Forward continuous current	I_F	100 ¹⁾	mA
Surge forward current at $t_p=10$ ms	I_{FSM}	750 ¹⁾	A
Power dissipation	P_{tot}	400 ¹⁾	mW
Thermal resistance junction to ambient air	$R_{\theta JA}$	300 ¹⁾	/W
Junction temperature	T_j	125	
Storage temperature range	T_{STG}	-55 --- + 150	

¹⁾Valid provided that electrodes are kept at ambient temperature.

ELECTRICAL CHARACTERISTICS

		MIN	TYP	MAX	UNITS
Reverse breakdown voltage at $I_R=100\mu A$	$V_{(BR)}$	100	110	-	V
Forward voltage pulse test $t_p=300\mu s, \delta < 2\%$ @ $I_F=1mA$ @ $I_F=200mA$	V_F	- -	0.4 -	0.45 1.0	V
Leakage current pulse test $t_p < 300\mu s$ @ $V_R=25V, T_J=25$ @ $V_R=25V, T_J=100$	I_R	- -	- -	100 20	nA μA
Junction capacitance at $V_R=1V$ $f=1MHz$	C_{tot}	-	7.0	-	pF
Reverse recovery time	t_{rr}	-	-	$5^{(2)}$	ns

²⁾ $I_F=10mA, I_R=10mA, I_{rr}=1mA, R_L=100\Omega$

www.galaxycn.com

FIG.1 –FORWARD DERATING CURVE

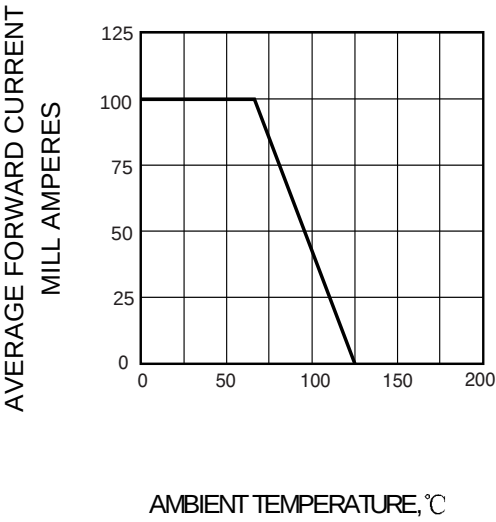


FIG.2 –PEAK FORWARD SURGE CURRENT

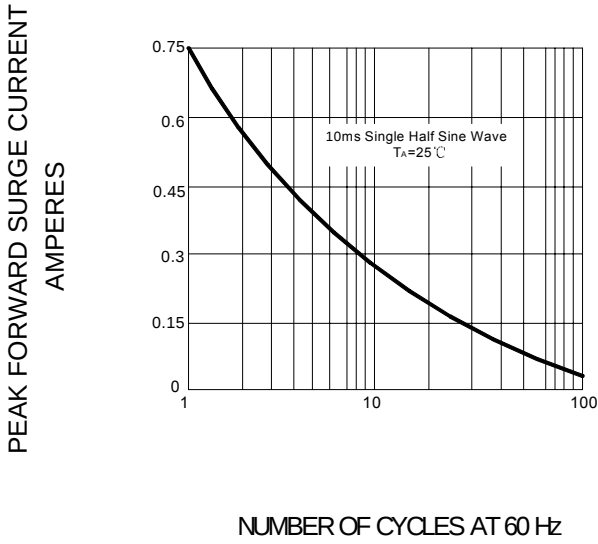


FIG.3-TYPECAL REVERSE CHARACTERISTICS

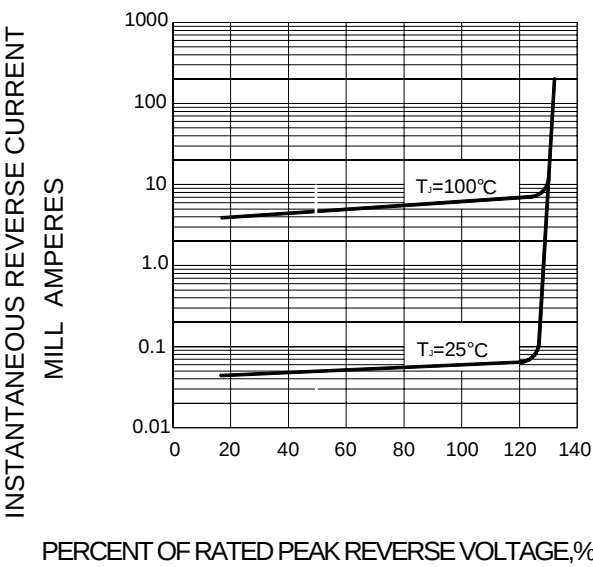


FIG.4-PEAK JUNCTION CAPACITANCE

