SCHOTTKY BARRIER DIODE

SOD-323

FEATURES

- Low Forward Voltage Drop
- Guard Ring Die Construction for Transient Protection
- Ideal for low logic level applications
- Low Capacitance
- Also Available in Lead Free Version

MARKING: SG

Maximum Ratings and Electrical Characteristics, Single Diode @T_A=25℃

Parameter	Symbol	Limits	Unit
Non-Repetitive Peak reverse voltage	V_{RM}	30	V
Forward Current	I_{FM}	100	mA
Forward surge Current t_p=10ms	I_{FSM}	750	mA
Power dissipation T_C=25℃	P_{tot}	250	mW
Thermal resistance junction to ambient air	$T_{\theta JA}$	500	℃/W
Junction temperature	T_J	150	℃
Storage temperature	T_{STG}	-65~+150	℃

Electrical Ratings @T_A=25℃

Parameter	Symbol	Min.	Typ	Max.	Unit	Conditions
Reverse breakdown voltage	V_R	30			V	IR=100μA
Forward voltage	V_F		300 360 470 580	 550 800	mV	I_F=2mA I_F=15mA I_F=50mA I_F=100mA
Reverse current	I_R			1	μA	V_R=25V
Capacitance between terminals	C_T		7		pF	V_R=10V,f=1MHz

Typical Characteristics

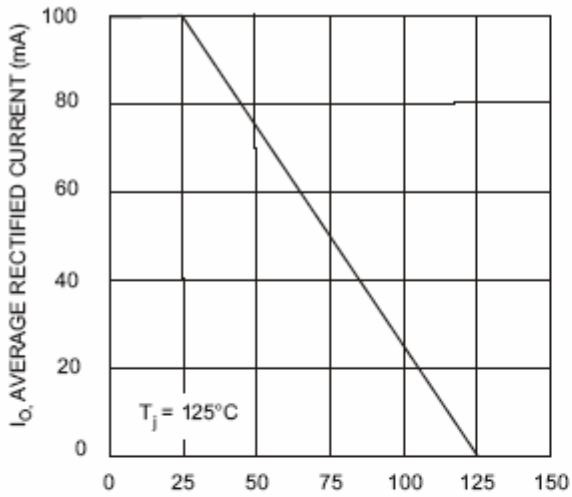

Fig. 1 Forward Current Derating Curve

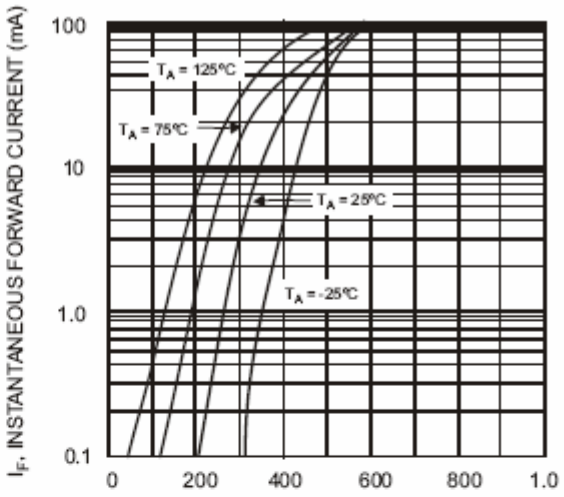

Fig. 2 Typical Forward Characteristics

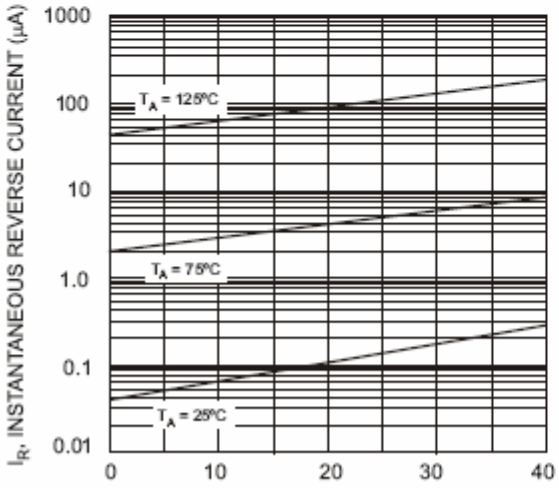

Fig. 3 Typical Reverse Characteristics

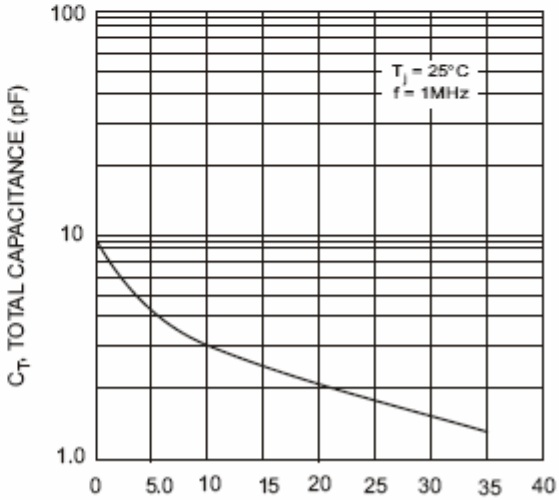

Fig. 4 Total Capacitance vs. Reverse Voltage