

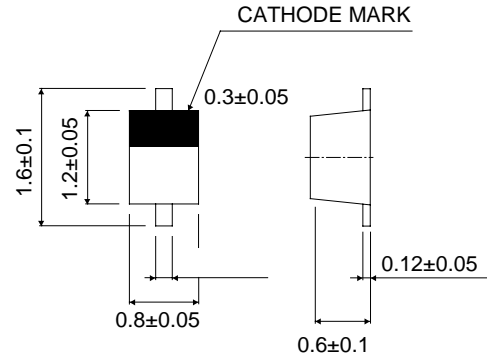
RoHS Compliant Product

A suffix of "-C" specifies halogen & lead-free

SOD-523

FEATURES

Fast Switching Speed
Surface Mount Package Ideally Suited for Automatic Insertion
For General Purpose Switching Applications
High Conductance



MARKING: 48

Dimensions in millimeters

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

Parameter	Symbol	Limits	Unit
Non-Repetitive Peak reverse voltage	V _{RM}	100	V
Peak Repetitive Peak reverse voltage	V _{RRM}	100	V
Working Peak Reverse Voltage	V _{RWM}	100	
DC Blocking Voltage	V _R	75	
RMS Reverse Voltage	V _{R(RMS)}	53	V
Forward Continuous Current	I _{FM}	500	mA
Average Rectified Output Current	I _O	250	mA
Peak forward surge current @=1.0µs	I _{FSM}	4.0	A
@=1.0s		2.0	
Power Dissipation	P _d	150	mW
Thermal Resistance Junction to Ambient	R _{θJA}	625	K/W
Storage temperature	T _{STG}	-65~+150	°C

Electrical Ratings @T_A=25°C

Parameter	Symbol	Min.	Typ.	Max.	Unit	Conditions
Reverse Breakdown Voltage	V _{(BR)R}	75			V	IR=5µA
	V _{(BR)R}	100			V	IR=100µA
Forward voltage	V _{F1}	0.62		0.72	V	I _F =5mA
	V _{F2}			1.0	V	I _F =100mA
Reverse current	I _R			25	nA	V _R =20V
Capacitance between terminals	C _T			4	pF	V _R =0V, f=1MHz
Reverse Recovery Time	t _{rr}			4	ns	I _F =I _R =10mA I _{rr} =0.1X I _R , R _L =100Ω

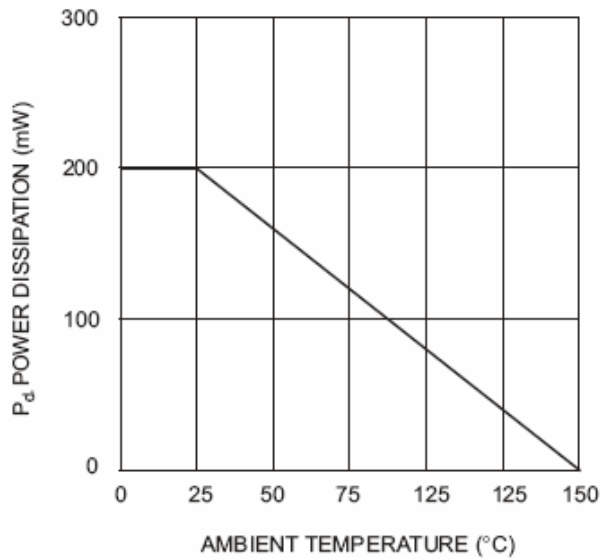


Fig. 1 Forward Current Derating Curve

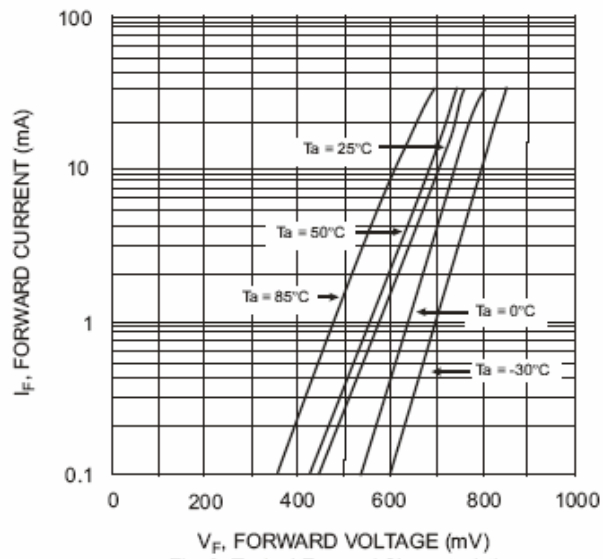


Fig. 2 Typical Forward Characteristics

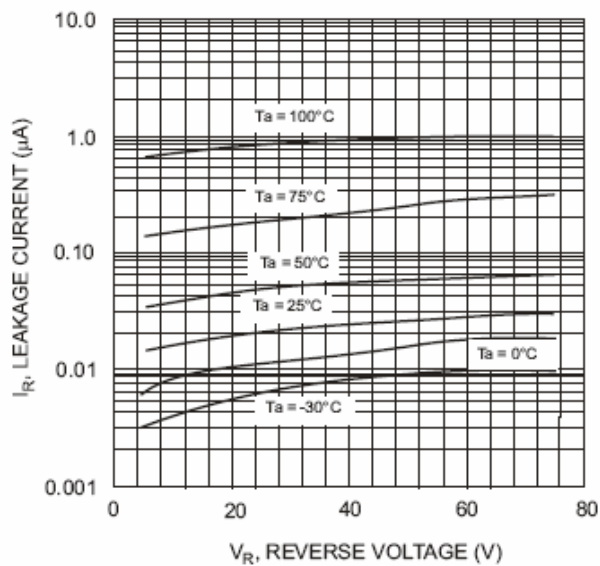


Fig. 3 Typical Reverse Characteristics

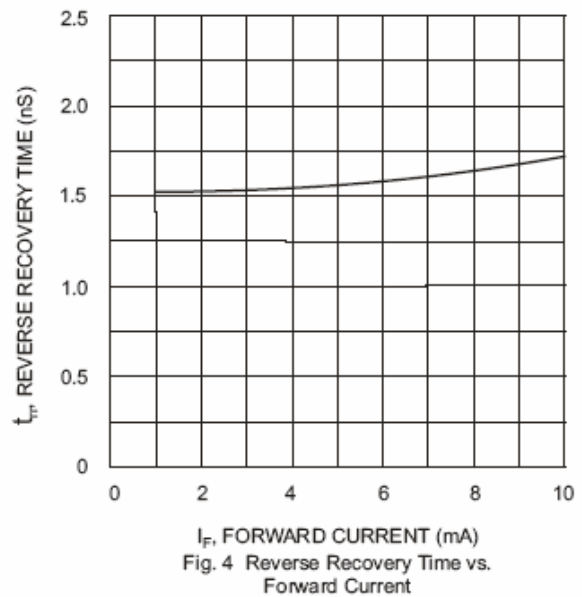


Fig. 4 Reverse Recovery Time vs. Forward Current

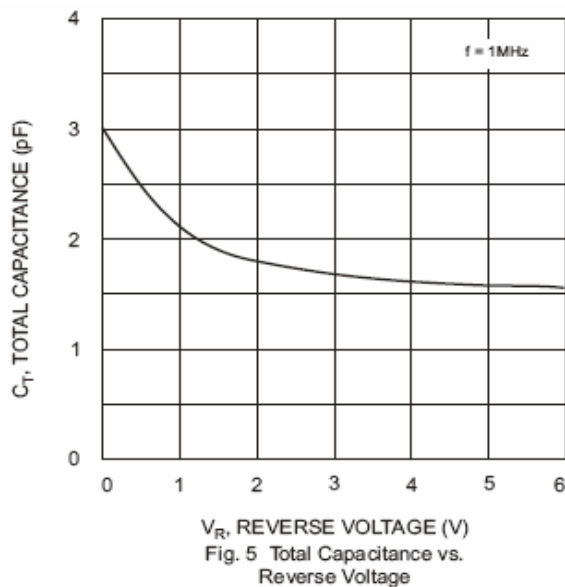


Fig. 5 Total Capacitance vs. Reverse Voltage