

RoHS Compliant Product

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

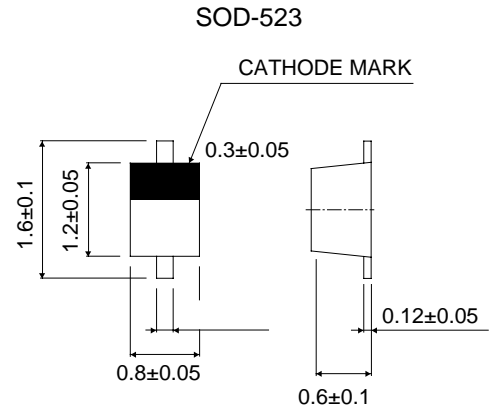
FEATURES

- High speed switching
- High reliability

MECHANICAL DATA

- Extremely small surface mounting type. (EMD2)
- High speed. (trr=4ns type.)
- Silicon epitaxial planer

Marking: 61



Dimensions in millimeters

MAXIMUM RATINGS ($T_J = 25$ unless otherwise noted)

Rating	Symbol	Value	Unit
Peak reverse voltage	V_{RRM}	85	Volts
DC reverse voltage	V_R	75	Volts
Mean rectifying current	I_O	250	mA
Peak forward current	I_{FM}	500	mA
Surge current (1s)	I_{surge}	500	mA
Junction Temperature	T_J	125	
Storage Temperature Range	T_{stg}	-55 to +125	

ELECTRICAL CHARACTERISTICS ($T_A = 25$)

Symbol	Parameter	Condition	Max.	Unit
V_F	forward voltage	$I_F = 1$ mA	715	mV
		$I_F = 10$ mA	855	mV
		$I_F = 50$ mA	1	V
		$I_F = 150$ mA	1.25	V
I_R	reverse current	$V_R = 25$ V	30	nA
		$V_R = 75$ V	1	μ A
		$V_R = 25$ V; $T_J = 150^\circ$ C	30	μ A
		$V_R = 75$ V; $T_J = 150^\circ$ C;	50	μ A
C_d	diode capacitance	$f = 1$ MHz; $V_R = 0$; see Fig.6	1	pF
t_{rr}	reverse recovery time	when switched from $I_F = 10$ mA to $I_R = 10$ mA; $R_L = 100 \Omega$; measured at $I_R = 1$ mA; see Fig.7	4	nS
V_{fr}	forward recovery voltage	when switched from $I_F = 10$ mA; $t_r = 20$ ns; see Fig.8	1.75	V

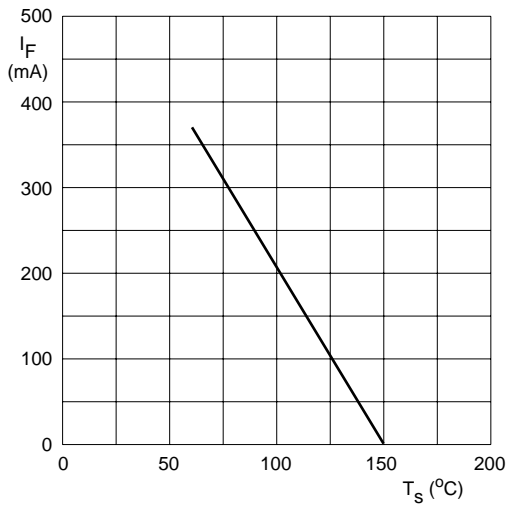


Fig.1 Maximum permissible continuous forward current as a function of soldering point temperature.

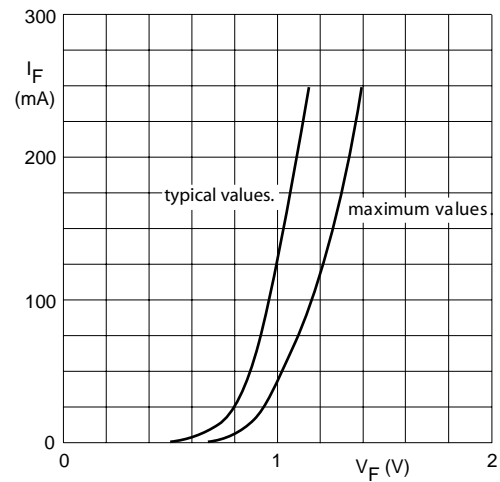


Fig.2 Forward current as a function of forward voltage $T_j = 25^{\circ}\text{C}$

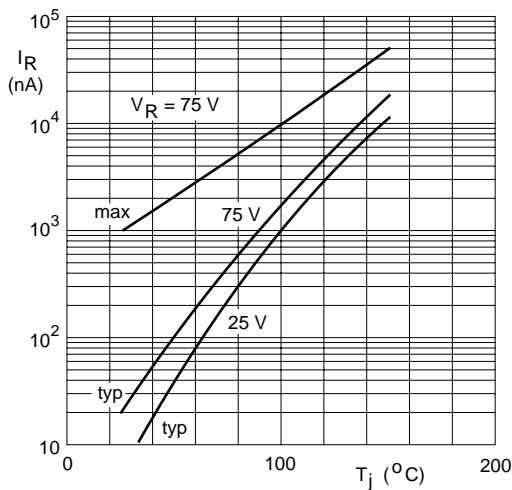


Fig.3 Reverse current as a function of junction temperature.

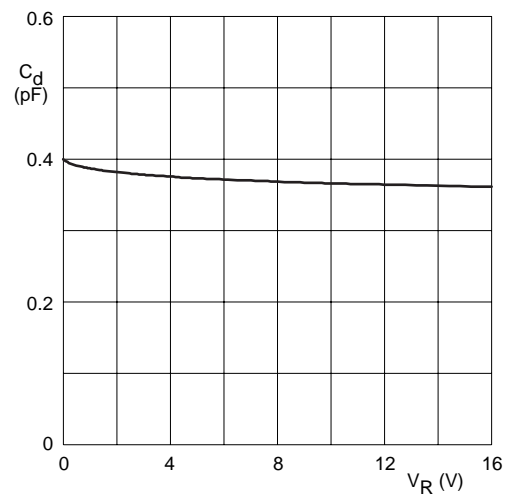


Fig.4 Diode capacitance as a function of reverse voltage; typical values. $f = 1 \text{ MHz}$; $T_j = 25^{\circ}\text{C}$.