

RoHS Compliant Product

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

FEATURES

- High Current Capability
- Extremely Low Reverse Current
- For Surface Mount Application
- Higher Temp Soldering : 250 °C for 10 Seconds at Terminals
- Low Forward Voltage
- Case: Molded Plastic

Marking :

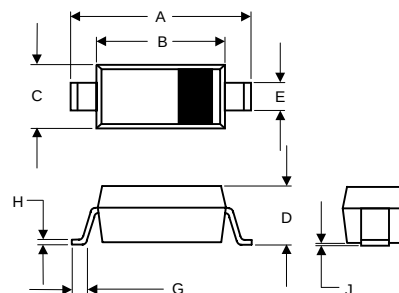
SCS0520RP : SD

SCS0540RP : SF

	MILLIMETERS		INCHES	
DIM	MIN	MAX	MIN	MAX
A	3.55	3.85	0.140	0.152
B	2.55	2.85	0.100	0.112
C	1.40	1.80	0.550	0.071
D	-----	1.15	-----	0.045
E	0.30	0.78	0.120	0.031
G	0.15	-----	0.006	-----
H	-----	0.25	-----	0.001
J	-----	0.15	-----	0.006

PACKAGE DIMENSIONS

SOD-123
PLASTIC PACKAGE



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

Parameter	Symbol	SCS0520RP	SCS0540RP	Unit
Peak Repetitive Peak reverse voltage	V _{RRM}			
Working Peak Reverse Voltage	V _{RWM}	20	40	V
DC Blocking Voltage	V _R			
RMS Reverse Voltage	V _{R(RMS)}	14	28	V
Average Rectified Output Current	I _O	500		mA
Peak forward surge current	I _{FSM}	5.5		A
Power Dissipation	P _d	410		mW
Thermal Resistance Junction to Ambient	R _{θJA}	244		K/W
Storage temperature	T _{STG}	-65~+150		°C
Voltage Rate of Change	dv/dt	1000		V/μs

Electrical Ratings @T_A=25°C

Parameter	Symbol	SCS0520RP	SCS0540RP	Unit	Conditions
Minimum Reverse Breakdown Voltage	V _{(BR)R}	20	-	V	I _R =250μA
		-	-		I _R =130μA
		-	40		I _R =20μA
Forward voltage	V _{F1}	0.3	-	V	I _F =0.1A
	V _{F2}	0.385	0.510		I _F =0.5A
	V _{F3}	-	0.62		I _F =1A
Reverse current	I _{R1}	75	-	μA	V _R =10V
	I _{R2}	-	-		V _R =15V
Reverse current	I _{R3}	250	10	μA	V _R =20V
	I _{R4}	-	-		V _R =30V
	I _{R5}	-	20		V _R =40V
Capacitance between terminals	C _T		170	pF	V _R =1V, f=1MHz
Reverse Recovery Time	t _{rr}		4	ns	I _F =I _R =10mA I _{rr} =0.1X I _R , R _L =100

● **RATING AND CHARACTERISTIC CURVES (SCS0520RP THRU SCS0540RP)**

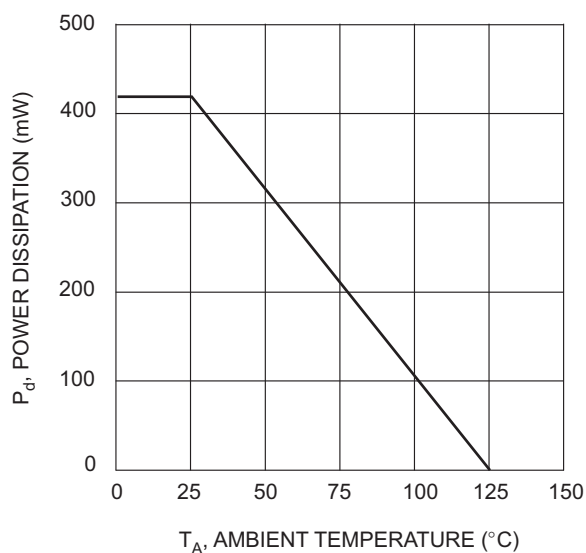


Fig. 1 Power Derating Curve

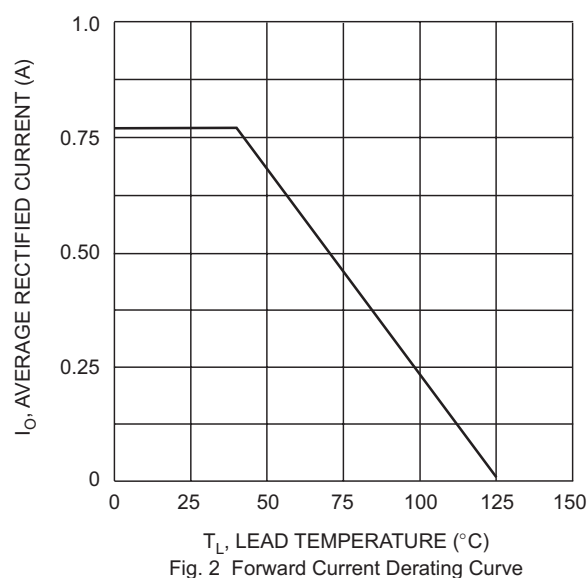


Fig. 2 Forward Current Derating Curve

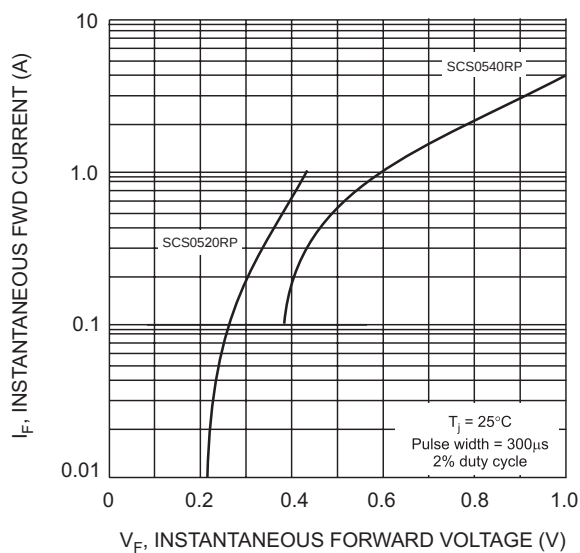


Fig. 3 Typical Forward Characteristics

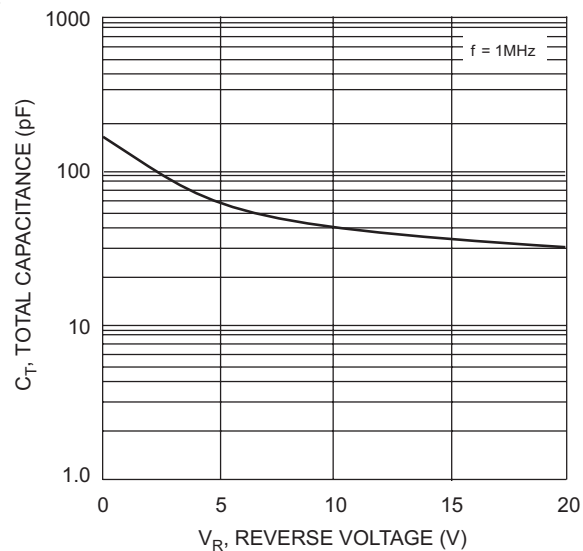


Fig. 4 Typ. Total Capacitance vs Reverse Voltage