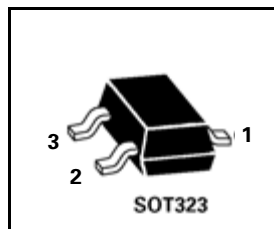


SOT323 SILICON EPITAXIAL SCHOTTKY BARRIER DIODES

ISSUE 1– DECEMBER 1998

ZUMD54 ZUMD54C

SINGLE	COMMON CATHODE
ZUMD54	ZUMD54C
Partmark: D8	Partmark: D8C



FEATURES: Low V_F & High Current Capability

APPLICATIONS: PSU, Mobile Telecomms & SCSI

ABSOLUTE MAXIMUM RATINGS.

PARAMETER	SYMBOL	VALUE	UNIT
Continuous Reverse Voltage	V_R	30	V
Forward Current	I_F	200	mA
Forward Voltage @ $I_F = 10\text{mA}$	V_F	400	mV
Repetitive Peak Forward Current	I_{FRM}	300	mA
Non Repetitive Forward Current $t < 1\text{s}$	I_{FSM}	600	mA
Power Dissipation at $T_{amb} = 25^\circ\text{C}$	P_{tot}	330	mW
Storage Temperature Range	T_{stg}	-55 to +150	$^\circ\text{C}$
Junction Temperature \square	T_j	125	$^\circ\text{C}$

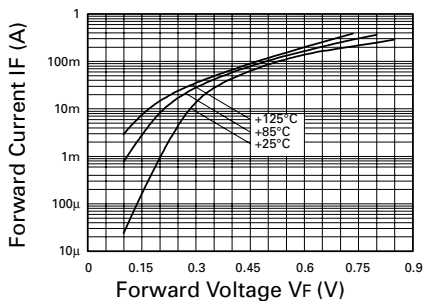
ELECTRICAL CHARACTERISTICS (at $T_{amb} = 25^\circ\text{C}$ unless otherwise stated).

PARAMETER	SYMBOL	MIN.	TYP.	MAX.	UNIT	CONDITIONS.
Reverse Breakdown Voltage	$V_{(BR)R}$	30	50		V	$I_R = 10\mu\text{A}$
Forward Voltage	V_F		135 200 280 350 530	240 320 400 500 1000	mV mV mV mV mV	$I_F = 0.1\text{mA}$ $I_F = 1\text{mA}$ $I_F = 10\text{mA}$ $I_F = 30\text{mA}$ $I_F = 100\text{mA}$
Reverse Current	I_R		1.4	2	μA	$V_R = 25\text{V}$
Diode Capacitance	C_D		7.5	10	pF	$f = 1\text{MHz}, V_R = 1\text{V}$
Reverse Recovery Time	t_{rr}			5	ns	switched from $I_F = 10\text{mA}$ to $I_R = 10\text{mA}$ $R_L = 100\Omega, I_R = 1\text{mA}$

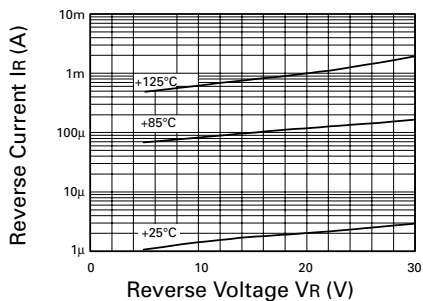
\square Dual Device; For simultaneous continuous use $T_j = 100^\circ\text{C}$.

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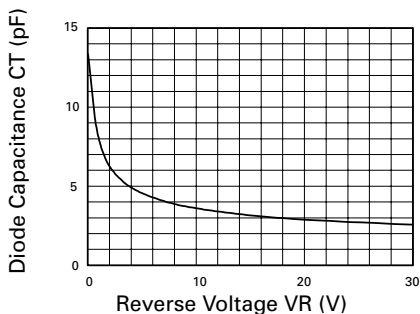
TYPICAL CHARACTERISTICS



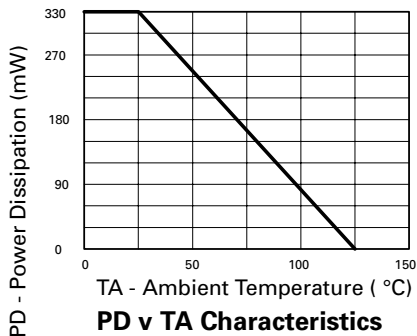
I_F v V_F Characteristics



I_R v V_R Characteristics



C_T v V_R Characteristics



PD v T_A Characteristics