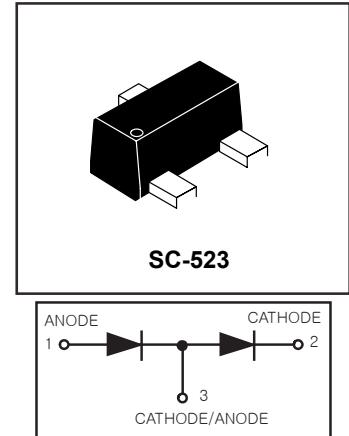




Dual Series Schottky Barrier Diodes

These Schottky barrier diodes are designed for high speed switching applications, circuit protection, and voltage clamping. Extremely low forward voltage reduces conduction loss. Miniature surface mount package is excellent for hand held and portable applications where space is limited.

- Extremely Fast Switching Speed
- Low Forward Voltage — 0.35 Volts (Typ) @ IF = 10 mAdc
- We declare that the material of product compliance with RoHS requirements.



ORDERING INFORMATION

Device	Marking	Shipping
FDR54SE	L4	3000/Tape&Reel

MAXIMUM RATINGS (TJ = 125°C unless otherwise noted)

Rating	Symbol	Value	Unit
Reverse Voltage	V _R	30	Volts
Forward Power Dissipation @ T _A = 25°C	P _D	150	mW
Forward Current (DC)	I _F	200 Max	mA
Junction Temperature	T _J	125 Max	°C
Storage Temperature Range	T _{stg}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS (T_A = 25°C unless otherwise noted) (EACH DIODE)

Characteristic	Symbol	Min	Typ	Max	Unit
Reverse Breakdown Voltage (IR = 10µA)	V _{(BR)R}	30	—	—	Volts
Total Capacitance (VR = 1.0 V, f = 1.0 MHz)	C _T	—	—	10	pF
Reverse Leakage (VR = 25 V)	I _R	—	0.5	2.0	µAdc
Forward Voltage (IF = 0.1 mA)	V _F	—	0.22	0.24	Vdc
Forward Voltage (IF = 30 mA)	V _F	—	0.41	0.5	Vdc
Forward Voltage (IF = 100 mA)	V _F	—	0.52	1.0	Vdc
Reverse Recovery Time (IF = IR = 10 mA, IR(REC) = 1.0 mA) Figure 1	t _{rr}	—	—	5.0	ns
Forward Voltage (IF = 1.0 mA)	V _F	—	0.29	0.32	Vdc
Forward Voltage (IF = 10 mA)	V _F	—	0.35	0.40	Vdc
Forward Current (DC)	I _F	—	—	200	mA
Repetitive Peak Forward Current	I _{FRM}	—	—	300	mA
Non-Repetitive Peak Forward Current (t < 1.0 s)	I _{FSM}	—	—	600	mA

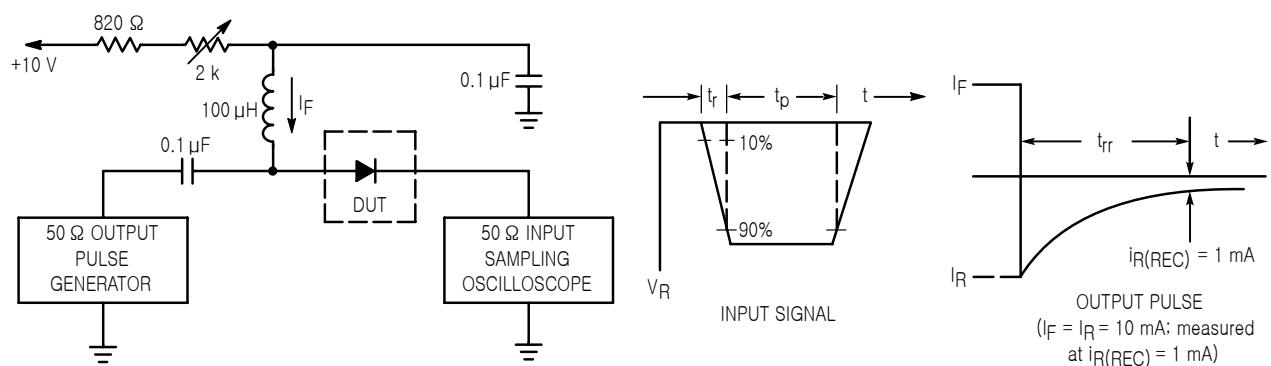


Fig.1 RECOVERY TIME EQUIVALENT TEST CIRCUIT

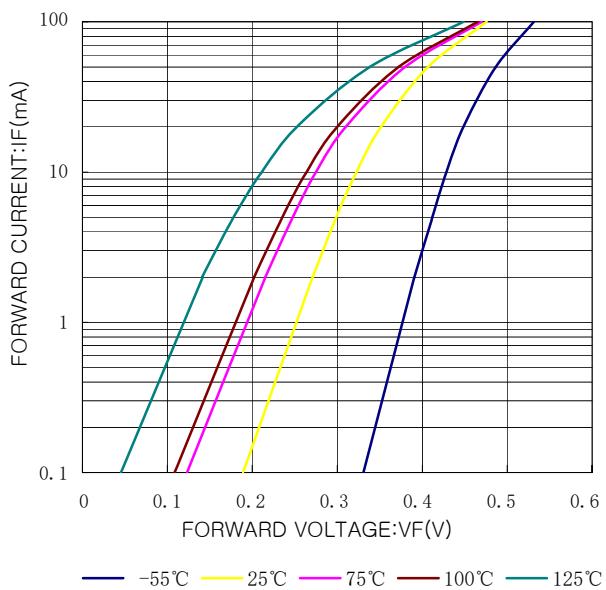


Fig.2 FORWARD CHARACTERISTICS

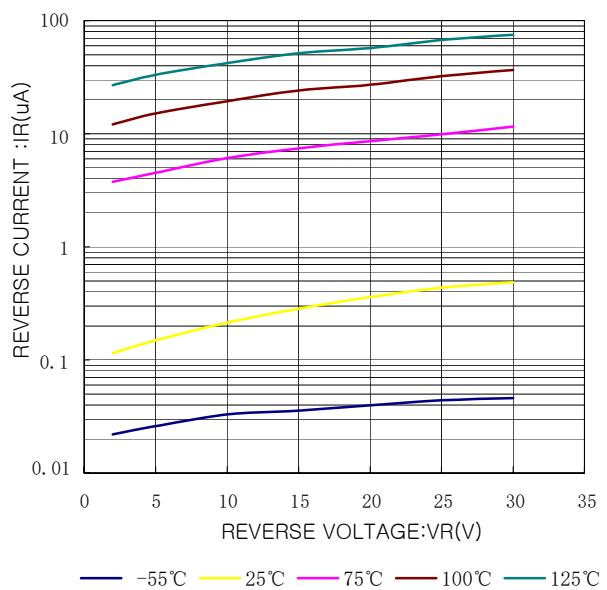


Fig.3 REVERSE CHARACTERISTICS

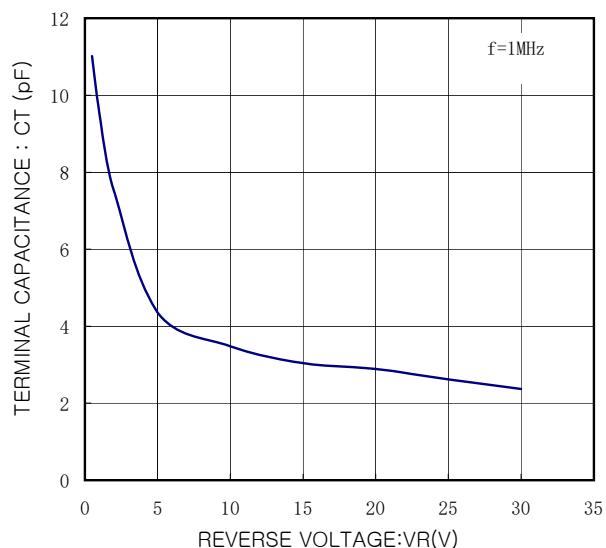
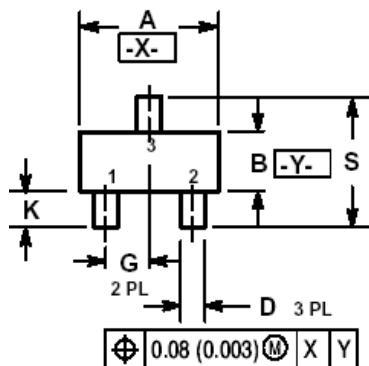


Fig.4 VR-CT CHARACTERISTICS

SOT-523


DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	1.50	1.60	1.70	0.059	0.063	0.067
B	0.75	0.85	0.95	0.030	0.034	0.040
C	0.60	0.70	0.80	0.024	0.028	0.031
D	0.23	0.28	0.33	0.009	0.011	0.013
G	0.50 BSC			0.020 BSC		
H	0.53 REF			0.021 REF		
J	0.10	0.15	0.20	0.004	0.006	0.008
K	0.30	0.40	0.50	0.012	0.016	0.020
L	1.10 REF			0.043 REF		
M	---	---	10 °	---	---	10 °
N	---	---	10 °	---	---	10 °
S	1.50	1.60	1.70	0.059	0.063	0.067

