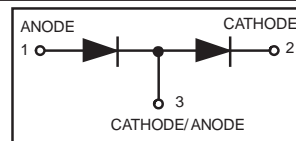
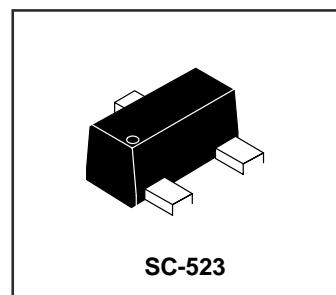


Dual Series Schottky Barrier Diodes

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) @ $I_F = 10 \text{ mAdc}$
- We declare that the material of product compliance with RoHS requirements.



ORDERING INFORMATION

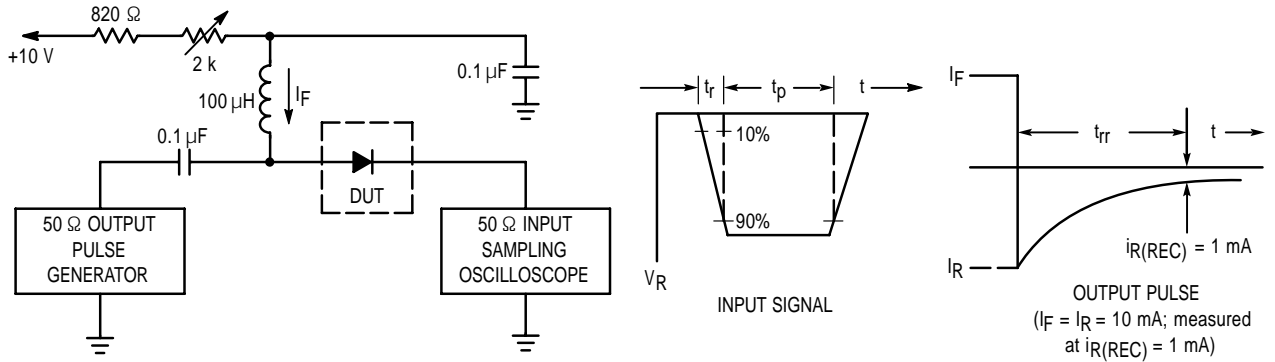
Device	Marking	Shipping
FDR54SE	L4	3000/Tape&Reel

MAXIMUM RATINGS (T_J = 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 (I _R = 10μA)	$V_{(BR)R}$	30	—	—	Volts
Total Capacitance (V _R = 1.0 V, f = 1.0 MHz)	C_T	—	—	10	pF
Reverse Leakage (V _R = 25 V)	I_R	—	0.5	2.0	μAdc
Forward Voltage (I _F = 0.1 mAdc)	V_F	—	0.22	0.24	Vdc
Forward Voltage (I _F = 30 mAdc)	V_F	—	0.41	0.5	Vdc
Forward Voltage (I _F = 100 mAdc)	V_F	—	0.52	1.0	Vdc
Reverse Recovery Time (I _F = I _R = 10 mAdc, I _{R(REC)} = 1.0 mAdc) Figure 1	t_{rr}	—	—	5.0	ns
Forward Voltage (I _F = 1.0 mAdc)	V_F	—	0.29	0.32	Vdc
Forward Voltage (I _F = 10 mAdc)	V_F	—	0.35	0.40	Vdc
Forward Current (DC)	I_F	—	—	200	mAdc
Repetitive Peak Forward Current	I_{FRM}	—	—	300	mAdc
Non-Repetitive Peak Forward Current (t < 1.0 s)	I_{FSM}	—	—	600	mAdc



- Notes: 1. A 2.0 kΩ variable resistor adjusted for a Forward Current (I_F) of 10 mA.
 2. Input pulse is adjusted so $I_R(\text{peak})$ is equal to 10 mA.
 3. $t_p \gg t_{rr}$

Fig.1 RECOVERY TIME EQUIVALENT TEST CIRCUIT

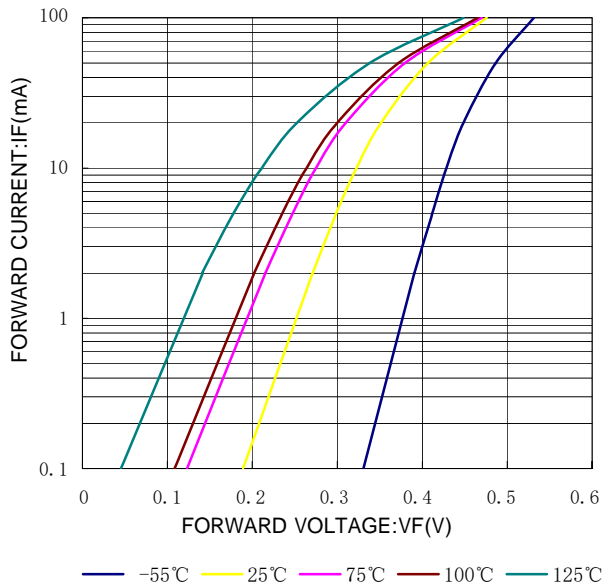


Fig.2 FORWARD CHARACTERISTICS

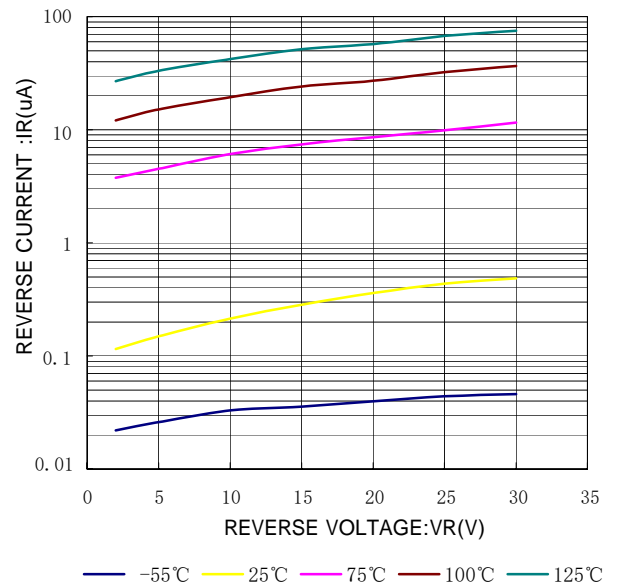


Fig.3 REVERSE CHARACTERISTICS

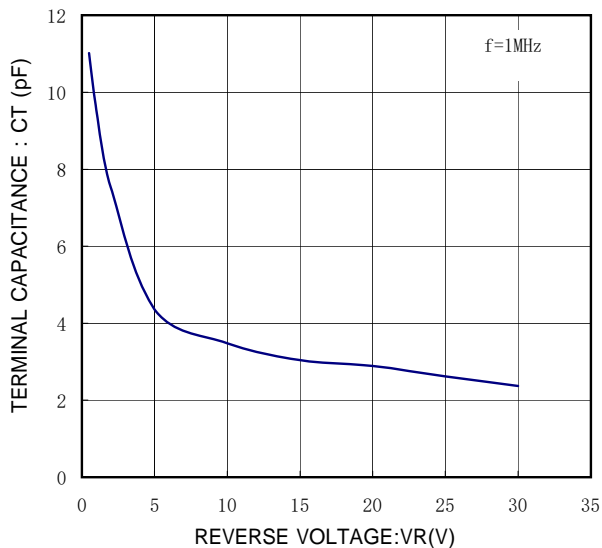
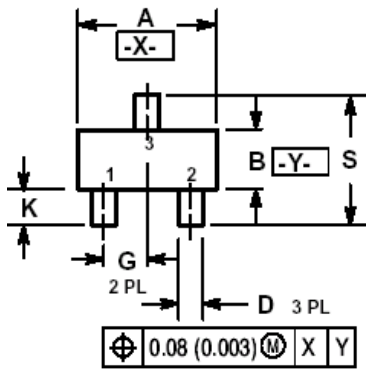


Fig.4 VR-CT CHARACTERISTICS

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

