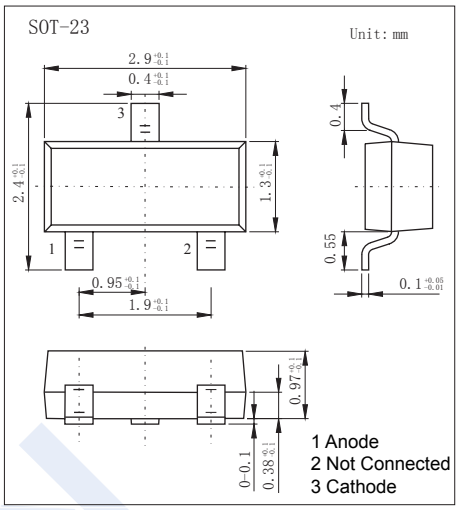
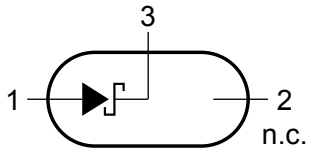
Schottky Diodes

1PS59SB20



■ Features

- Low forward voltage
- Guard ring protected
- Small SMD package.
- Ultra fast switching speed



■ Absolute Maximum Ratings Ta = 25℃

Parameter	Symbol	Rating	Unit
Reverse Voltage	V_{RM}	40	V
Forward Current	I_F	0.5	A
Non-Repetitive Peak Forward Surge Current	I_{FSM}	2	
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	500	℃/W
Junction Temperature	T_J	125	℃
Storage Temperature range	T_{stg}	-65 to 150	

■ Electrical Characteristics Ta = 25℃

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Reverse breakdown voltage	V_R	I_R= 100 uA	40			V
Forward voltage	V_F	I_F= 500 mA			0.55	
Reverse voltage leakage current	I_R	V_R= 35 V			100	uA
		V_R= 35 V , T_J = 100℃			10	mA
Junction capacitance	C_j	V_R= 0 V, f= 1 MHz	60		90	pF

■ Marking

Marking	20

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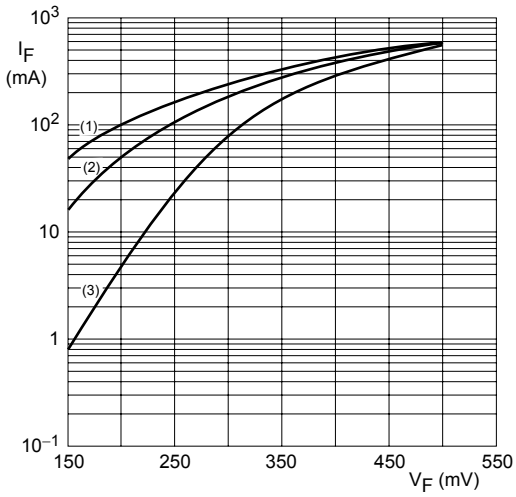
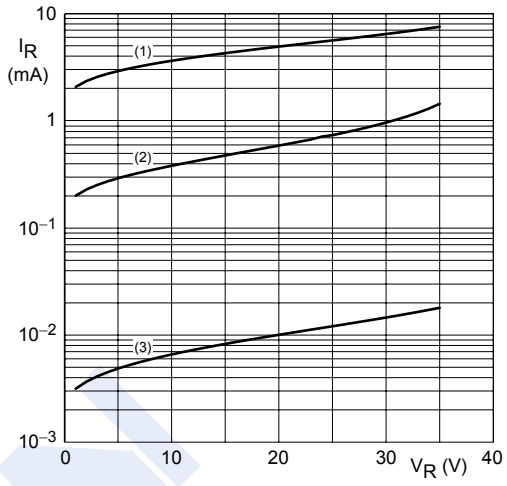
■ Typical Characterisitics



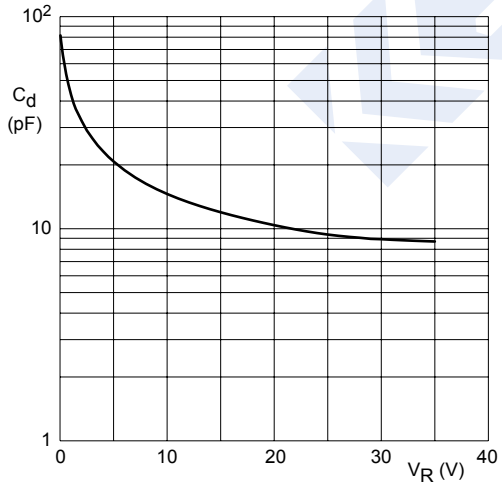
(1) T_{amb} = 125 °C.
(2) T_{amb} = 85 °C.
(3) T_{amb} = 25 °C.

Fig.1 Forward current as a function of forward voltage; typical values.



(1) T_{amb} = 125 °C.
(2) T_{amb} = 85 °C.
(3) T_{amb} = 25 °C.

Fig.2 Reverse current as a function of reverse voltage; typical values.



f = 1 MHz; T_j = 25 °C.

Fig.3 Diode capacitance as a function of reverse voltage; typical values.