

**SB05-03C****30V, 500mA Rectifier**

Applications

- Universal-use rectifier.
- High frequency rectification (switching regulators, converters, choppers).

Features

- Low forward voltage (V_F max=0.55V).
- Fast reverse recovery time (t_{rr} max=10ns).
- Low switching noise
- Low leakage current and high reliability due to highly reliable planar structure.
- Small-sized package, permitting applied sets to be compact and slim.

Absolute Maximum Ratings at $T_a=25^\circ\text{C}$

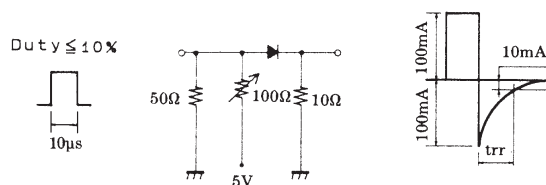
			unit
Repetitive Peak Reverse Voltage	V_{RRM}	30	V
Nonrepetitive Peak Reverse Voltage	V_{RSM}	35	V
Average Output Current	I_o	500	mA
Surge Forward Current	I_{FSM}	5	A
		50Hz sine wave, 1 cycle	
Junction Temperature	T_j	-55 to +125	$^\circ\text{C}$
Storage Temperature	T_{stg}	-55 to +125	$^\circ\text{C}$

Electrical Characteristics at $T_a=25^\circ\text{C}$

			min	typ	max	unit
Reverse Voltage	V_R	$I_R=150\mu\text{A}$	30			V
Forward Voltage	V_F	$I_F=500\text{mA}$			0.55	V
Reverse Current	I_R	$V_R=15\text{V}$			30	μA
Interterminal Capacitance	C	$V_R=10\text{V}$, $f=1\text{MHz}$		16		pF
Reverse Recovery Time	t_{rr}	$I_F=I_R=100\text{mA}$, See specified Test Circuit.			10	ns
Thermal Resistance	R_{thj-a}			560		$^\circ\text{C}/\text{W}$

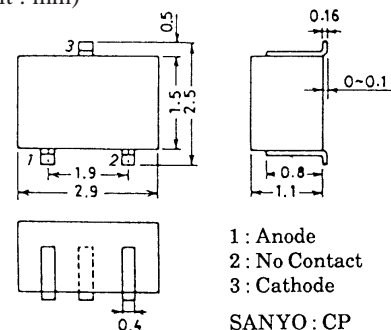
Marking : Q

t_{rr} Test Circuit



Package Dimensions 1148A

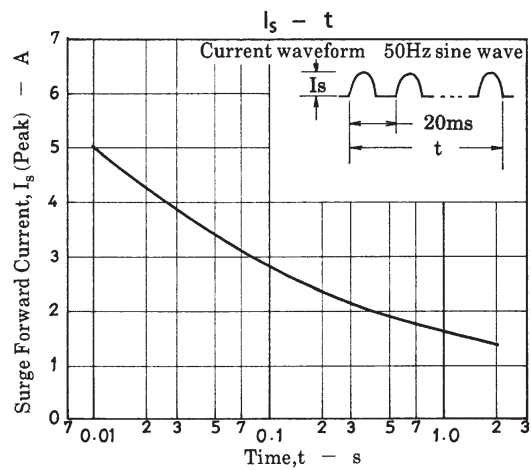
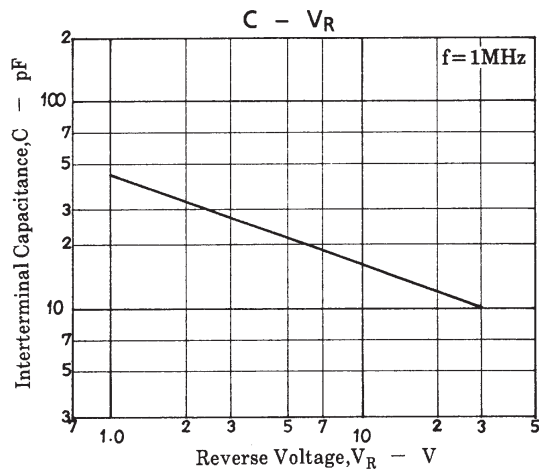
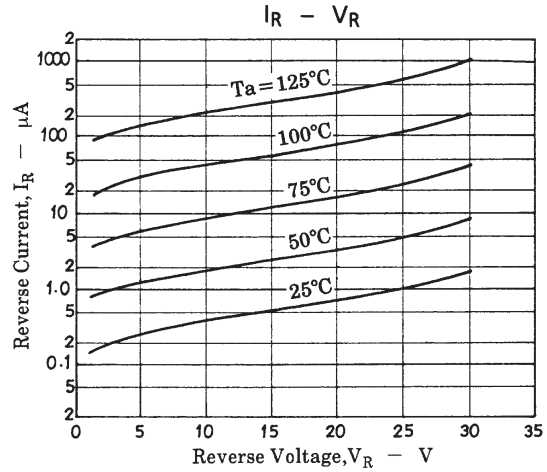
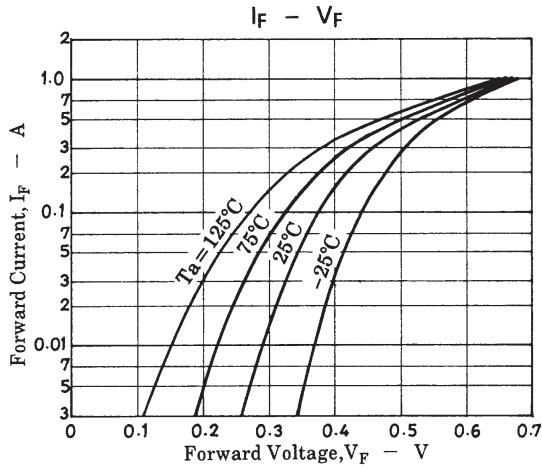
(unit : mm)



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