



**SB05-03C**

**30V, 500mA Rectifier**

**Applications**

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

**Features**

- Low forward voltage ( $V_F \text{ max}=0.55\text{V}$ ).
- Fast reverse recovery time ( $t_{rr} \text{ max}=10\text{ns}$ ).
- 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  $T_a=25^\circ\text{C}$

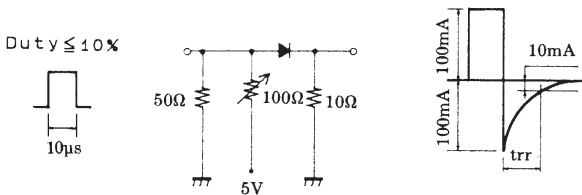
			unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	30	V
Nonrepetitive Peak Reverse	$V_{RSM}$	35	V
Surge Voltage			
Average Output Current	$I_o$	500	mA
Surge Forward Current	$I_{FSM}$	5	A
Junction Temperature	$T_j$	-55 to +125	$^\circ\text{C}$
Storage Temperature	$T_{stg}$	-55 to +125	$^\circ\text{C}$

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

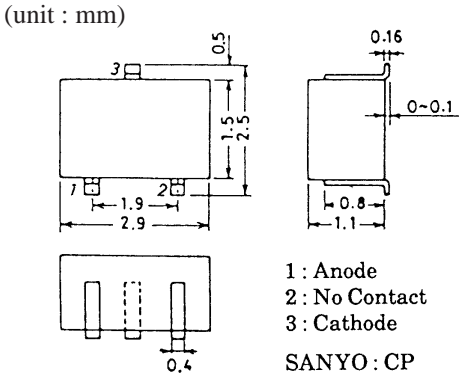
			min	typ	max	unit
Reverse Voltage	$V_R$	$I_R=150\mu\text{A}$	30			V
Forward Voltage	$V_F$	$I_F=500\text{mA}$			0.55	V
Reverse Current	$I_R$	$V_R=15\text{V}$			30	$\mu\text{A}$
Interterminal Capacitance	$C$	$V_R=10\text{V}, f=1\text{MHz}$		16		pF
Reverse Recovery Time	$t_{rr}$	$I_F=I_R=100\text{mA}$ ,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

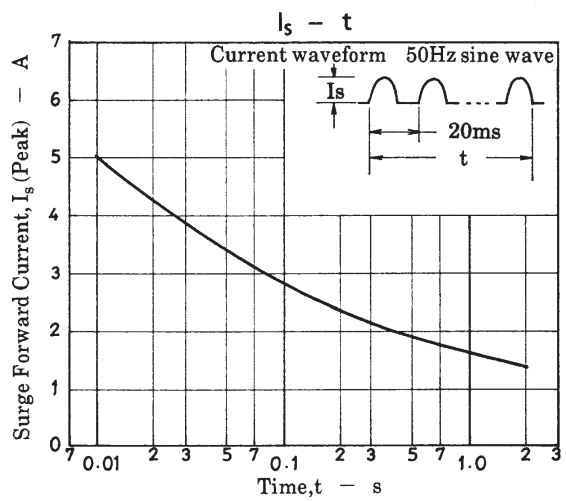
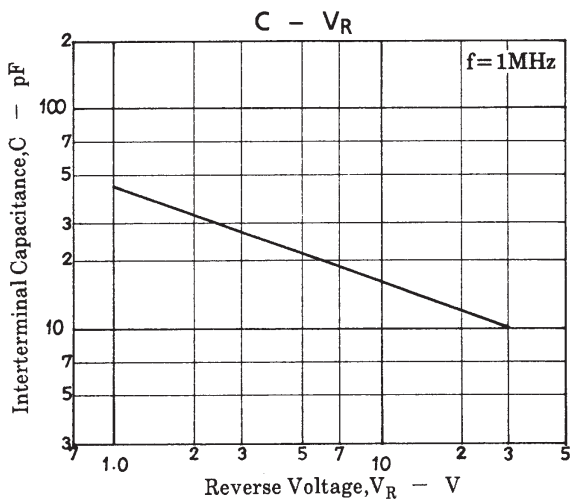
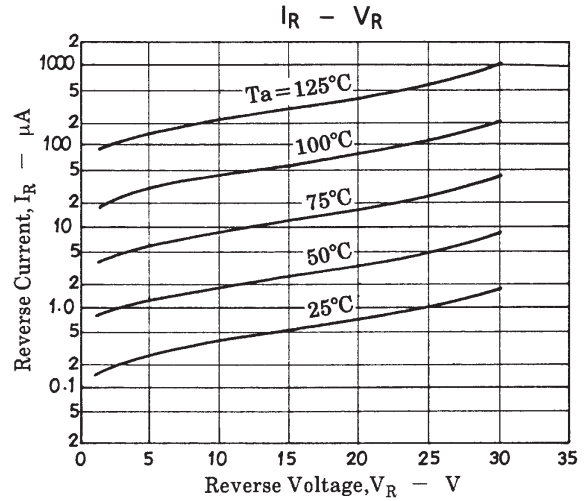
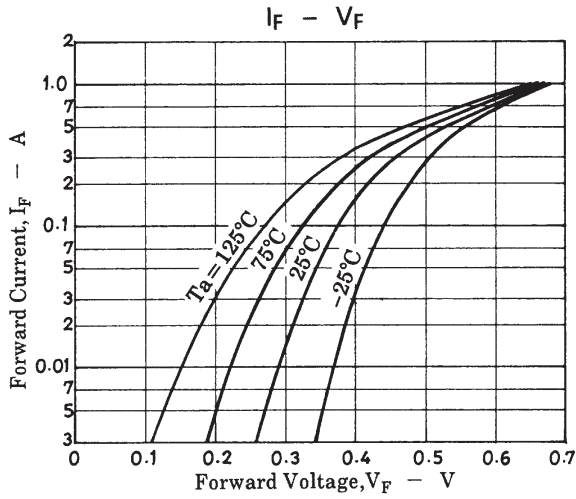
Marking : Q

**$t_{rr}$  Test Circuit**



**Package Dimensions** 1148A





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