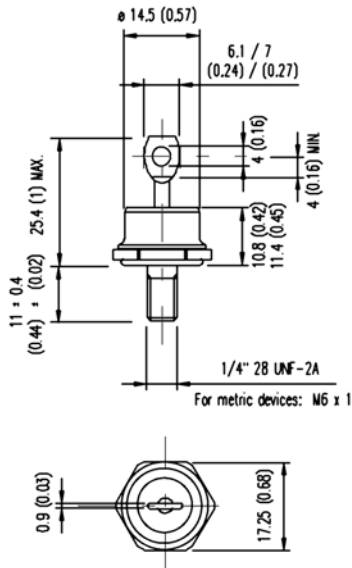


SBR7035 thru SBR7045

70 Amps Schottky Rectifiers

Outlines Table



70HF(R)

Case Style DO-203AB (DO-5)
All dimensions in millimeters (inches)



case style
DO-203AB (DO-5)

	Working peak reverse voltage	Repttitive peak reverse voltage
SBR7035	35V	35V
SBR7045	45V	45V

- * Schottky barrier rectifier
- * Low forward voltage
- * 150 °C junction temperature
- * Guard ring protection
- * Reverse energy tested
- * Add suffix R for reverse polarity

Electrical Characteristics

Average forward current	$I_{F(AV)}$	70 Amps	$T_C = 92^\circ\text{C}$, square wave, $R_{\theta JC} = 0.9^\circ\text{C/W}$
Maximum surge current	I_{FSM}	1000 Amps	8.3 ms, half sine, $T_J = 125^\circ\text{C}$
Maximum repetitive peak reverse current	$I_{F(OV)}$	2 Amps	$f = 1\text{KHz}$, 25°C , 1 μSec square wave
Maximum peak forward voltage	V_{FM}	0.58 Volt	$I_{FM} = 60\text{A}$; $T_J = 125^\circ\text{C}$ *
Maximum peak forward voltage	V_{FM}	0.60 Volt	$I_{FM} = 60\text{A}$; $T_J = 25^\circ\text{C}$ *
Maximum peak reverse current	I_{RM}	500 mA	V_{RRM} , $T_J = 125^\circ\text{C}$ *
Maximum peak reverse current	I_{RM}	2.0 mA	V_{RRM} , $T_J = 25^\circ\text{C}$
Maximum junction capacitance	C_1	2700 pF	$V_R = 5.0\text{V}$, $T_1 = 25^\circ\text{C}$

* Pulse test: Pulse width 300 μ sec, Duty cycle 2%

Thermal and Mechanical Characteristics

Storage temp range	T _{STG}	-65°C to 150°C
Operating junction temp range	T _J	-65°C to 150°C
Maximum thermal resistance	R _{θJC}	0.9°C/W Junction to case
Typical thermal resistance (greased)	R _{θCS}	0.5°C/W Junction to case
Maximum mounting torque		25–30 inch pounds
Weight		0.54 ounce (15.3 grams) typical

RATINGS AND CHARACTERISTIC CURVES

Figure 1
Typical Forward Characteristics

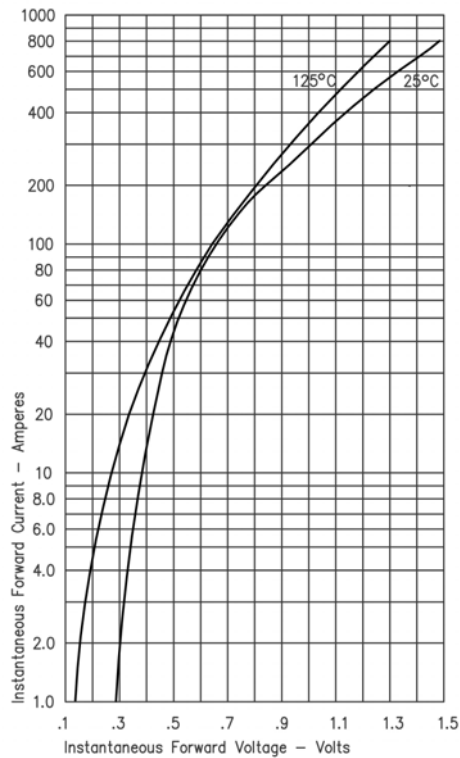


Figure 3
Typical Junction Capacitance

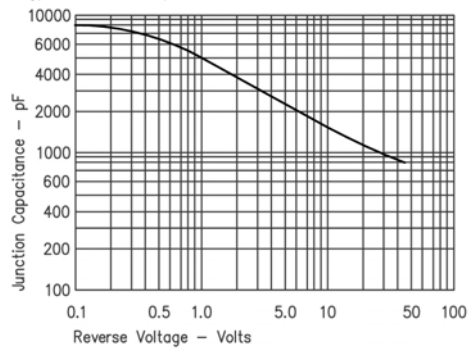


Figure 4
Forward Current Derating

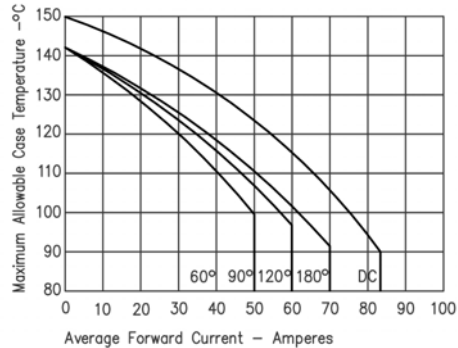


Figure 2
Typical Reverse Characteristics

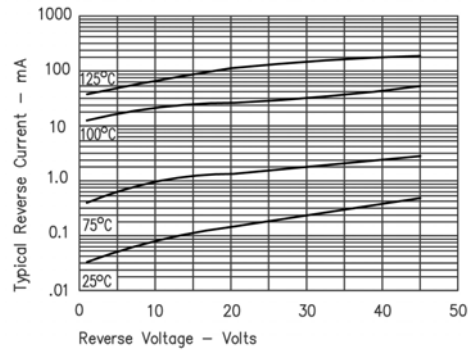


Figure 5
Maximum Forward Power Dissipation

