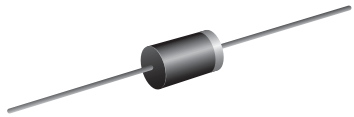
SBYV26A- SBYV26E

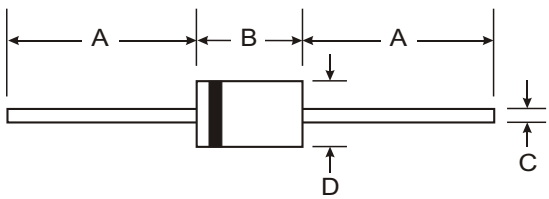
SUPER FAST RECTIFIER DIODES

VOLTAGE RANGE: 200 - 1000V
CURRENT: 1.0 A



Features

- Glass passivated
- High maximum operating temperature
- Low leakage current
- Excellent stability
- Guaranteed avalanche energy absorption capability



DO-41		
Dim	**Min**	**Max**
A	25.40	—
B	4.06	5.21
C	0.71	0.864
D	2.00	2.72
All Dimensions in mm		

Mechanical Data

- Case: D O - 4 1 Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.34 grams (approx.)
- Mounting Position: Any
- Marking: Type Number

RoHS COMPLIANT

Maximum Ratings and Electrical Characteristics

T_A = 25°C unless otherwise specified

Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Characteristic	Symbol	SBYV26A	SBYV26B	SBYV26C	SBYV26D	SBYV26E	Unit
Maximum recurrent peak reverse voltage	V_{RRM}	200	400	600	800	1000	V
Maximum RMS voltage	V_{RMS}	140	280	420	560	700	V
Maximum DC blocking voltage	V_{DC}	200	400	600	800	1000	V
Maximum average forward rectified current 9.5 mm lead length, @T_A=75℃	$I_{F(AV)}$	1.0					A
Peak forward surge current 10ms single half-sine-wave superimposed on rated load @T_J=125℃	I_{FSM}	30.0					A
Maximum instantaneous forward voltage @ 1.0A	V_F	2.5					V
Maximum reverse current @T_A=25℃	I_R	5.0					μA
at rated DC blocking voltage @T_A=100℃		150.0					
Maximum reverse recovery time (Note1)	t_{rr}	30			75		ns
Typical junction capacitance (Note2)	C_J	45			40		pF
Typical thermal resistance (Note3)	$R_{\theta JA}$	100					℃/W
Operating junction temperature range	T_J	- 55 ----- + 150					℃
Storage temperature range	T_{STG}	- 55 ----- + 150					℃

NOTE: 1. Measured with I_F=0.5A, I_R=1A, I_{rr}=0.25A.
2. Measured at 1MHz and applied reverse voltage of 4.0V DC.
3. Thermal resistance from junction to ambient.

FIG.1 -- FORWARD DERATING CURVE

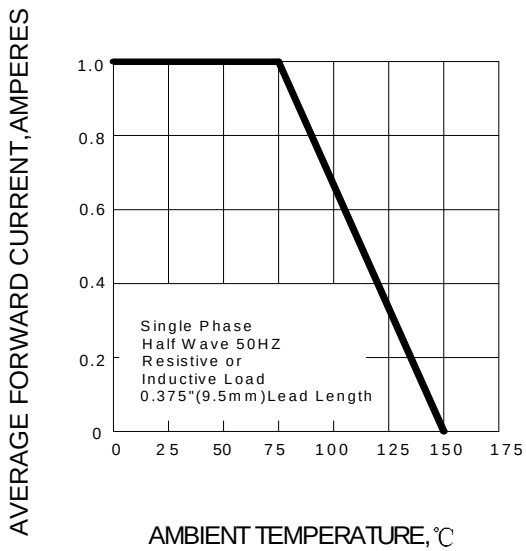


FIG.2 -- TYPICAL FORWARD CHARACTERISTIC

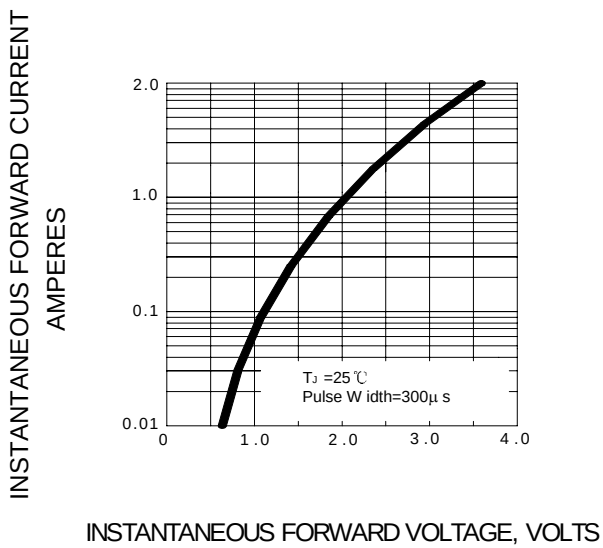


FIG.3 --PEAK FORWARD SURGE CURRENT

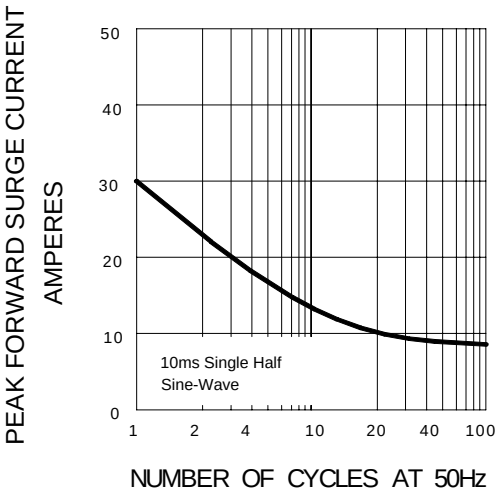
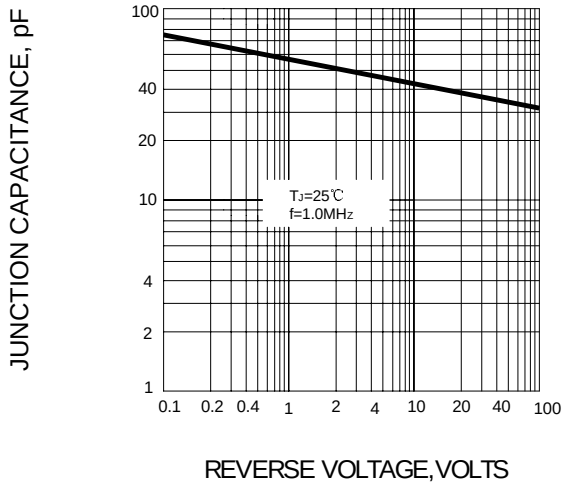



FIG.4 -- TYPICAL JUNCTION CAPACITANCE