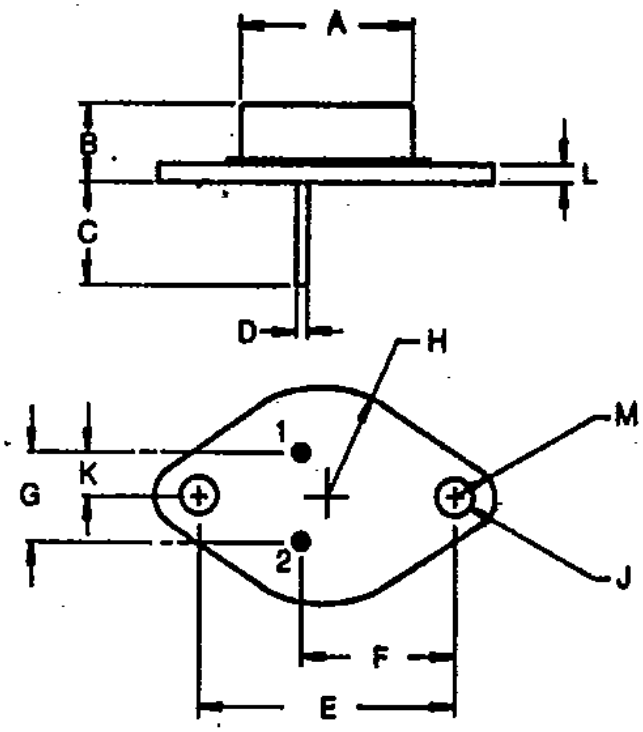
Dual Schottky Rectifier

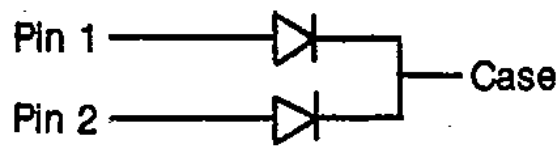
30 A Avg; V_{RRM} up to 50 Volts

Series SBT30

- Guard ring reverse protection
- 50 Volts V_{RRN} / V_{RWM}
- 30 Amperes
- 175° (T_J)
- Center tap



Dim.	Inches		Millimeter		
	Minimum	Maximum	Minimum	Maximum	Notes
A	—	0.875	—	22.23	Dia.
B	0.250	0.450	6.35	11.43	
C	0.312	—	7.92	—	
D	0.038	0.043	0.97	1.09	Dia.
E	1.177	1.197	29.90	30.40	
F	0.655	0.675	16.64	17.15	
G	0.420	0.440	10.67	11.18	
H	—	0.525	—	13.34	Rad.
J	0.151	0.161	3.84	4.09	Dia.
K	0.205	0.225	5.21	5.72	
L	—	0.135	—	3.43	
M	—	0.188	—	4.78	Rad.



Terminal Connections
Pin 1 Anode 1
Pin 2 Anode 2
Case - Common Cathode

TO-204AA
(TO-3)

Catalog Number	Pro Electron Number	Working Peak Reverse Voltage V_{RWM}	Rep. Peak Reverse Voltage V_{RRM}
SBT3035	BYS79-35	35	35
SBT3040	BYS79-40	40	40
SBT3045	BYS79-45	45	45
SBT3050	BYS79-50	50	50

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Electrical characteristics

Average output current per pkg	$I_{F(AV)}$	30 Amps	$T_C = 150°C$
Max average forward current, per leg	$I_{F(AV)}$	15 Amps	$T_C = 155°C$
Maximum surge current	I_{FSM}	600 Amps	8.3 ms, half sine, $T_J = 175°C$
Maximum repetitive peak reverse current	$I_{R(OV)}$	2 Amps	f = I KHz, 25°
Maximum peak forward voltage	V_{FM}	0.66 volts	$I_{FM} = 30A$: $T_J = 25°C$*
Maximum peak reverse current	I_{RM}	50mA	V_{RRM}, $T_C = 125°C$*
Typical Reverse current, per leg	I_{RM}	2mA	V_{RRM}, $T_J = 25°C$*
Typical junction capacitance	C_J	2000pF	$V_R = 5.0V$, $T_C = 25°C$

Thermal Characteristics

Storage temp range	T_{stg}	−55°C to +175°C	
Operating junction temp range	T_J	−55°C to +175°C	
Maximum thermal resistance per leg, per package,	$R\Theta_{JC}$	1.4°C/W	Junction to case
			0.84°C/W
Typical thermal resistance	0.1°C/W	Case to sink	

Mechanical Characteristics

Base	Nickel plated steel. Glass to metal construction.
Header	Nickel plated steel.
Weight	Approximately 1.0 ounce (28 grams)
Dimensions	In accordance with JEDEC TO-204AA (TO-3) outline

*Pulse test: Pulse width 300μsec, Duty cycle 2%