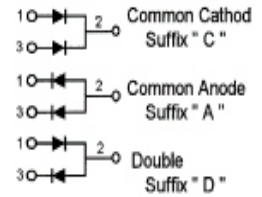


## CDBD1530 Thru CDBD1560

Reverse Voltage: 20 - 60 Volts  
Forward Current: 15.0 Amp

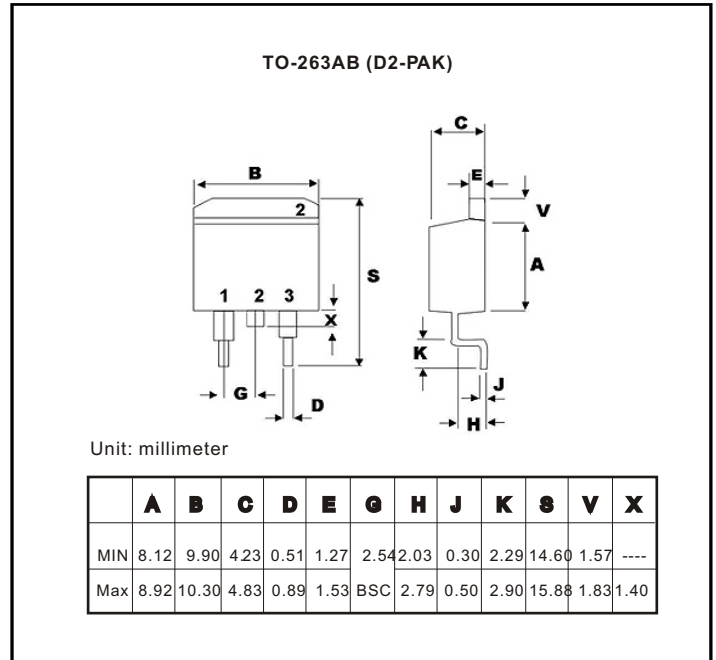


### Features

- Low forward voltage
- Low Switching noise
- High surge capacity
- Lower power loss & high efficiency
- Similar size to instrial TO-220 package
- Plastic package has Underwriters Lab. flammability classification 94V-0
- Guarentee reverse avalanche
- Guard-ring for transient protection

### Mechanical data

Case: JEDEC DO-263AB molded plastic  
Terminals: solderable per MIL-STD-750, method 2026  
Approx. Weight: 2.24 gram



### Maximum Ratings and Electrical Characteristics

Parameter	Symbol	CDBD1530	CDBD1540	CDBD1545	CDBD1550	CDBD1560	Unit
Max. Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	30	40	45	50	60	V
Max. DC Blocking Voltage	V <sub>DC</sub>	30	40	45	50	60	V
Max. RMS Voltage	V <sub>RMS</sub>	21	28	32	35	42	V
Peak Surge Forward Current 8.3ms single halfsine-wave superimposed on rate load ( JEDEC method )	I <sub>FSM</sub>	150					A
Max. Average Forward Current	I <sub>O</sub>	15					A
Max. Forward Current at 7.5A T <sub>j</sub> =25°C T <sub>j</sub> =100°C	V <sub>F</sub>	0.55 0.48			0.65 0.57		V
Max. DC Reverse Current at Rated DC Blocking Voltage T <sub>a</sub> =25°C T <sub>a</sub> =100°C	I <sub>R</sub>	1.0 50					mA
Typical Thermal Resistance (Note 1)	R <sub>θJC</sub>	30					°C/W
Operating Junction temperature	T <sub>j</sub>	-50 to +125					°C
Storage Temperature	T <sub>STG</sub>	-65 to +150					°C

Note 1: Thermal resistance from junction to Case.

## Rating and Characteristic Curves (CDBD1630 Thru CDBD1660)

Fig. 1 - Reverse characteristics

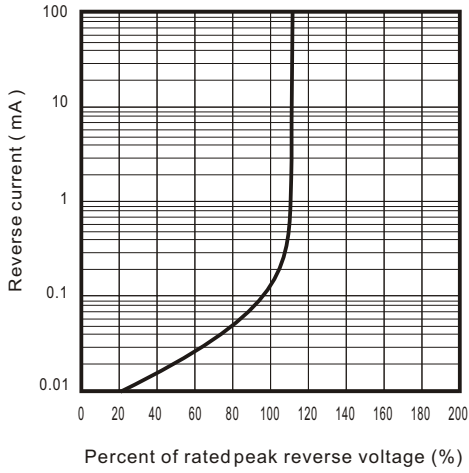


Fig.2 - Forward characteristics

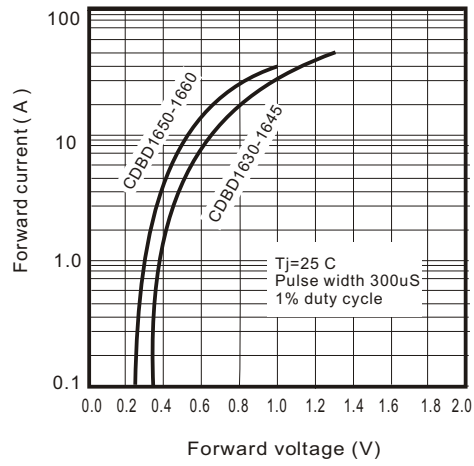


Fig. 3 - Junction capacitance

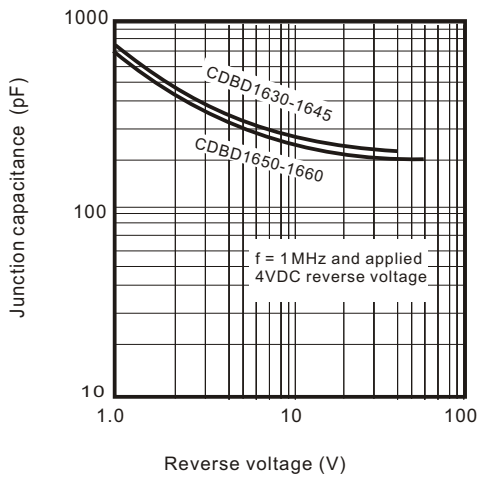


Fig. 4 - Current derating curve

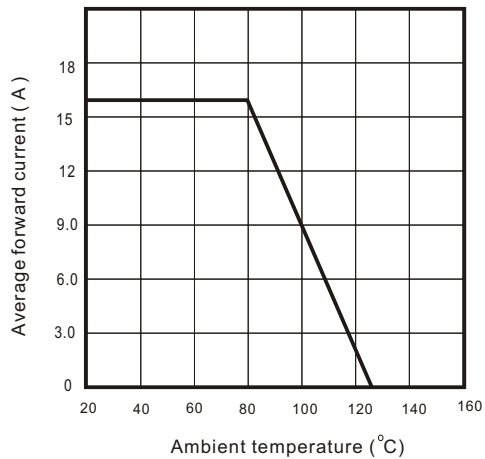


Fig. 5 - Non repetitive forward surge current

