

CDBD1530 Thru CDBD1560

Reverse Voltage: 20 - 60 Volts

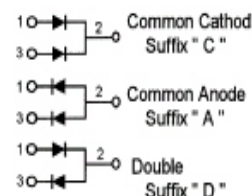
Forward Current: 15.0 Amp

Features

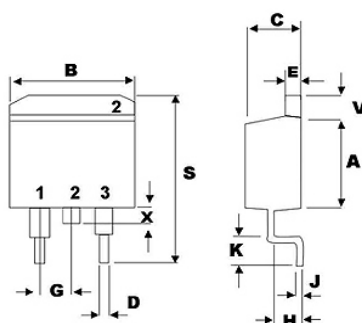
- Low forward voltage
- Low Switching noise
- High surge capacity
- Lower power loss & high efficiency
- Similar size to instrial TO-220 package
- Plastic package has Underwriters Lab. flammability classification 94V-0
- Guarentee reverse avalanche
- Guard-ring for transient protection

Mechanical data

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



TO-263AB (D2-PAK)



Unit: millimeter

	A	B	C	D	E	G	H	J	K	S	V	X
MIN	8.12	9.90	4.23	0.51	1.27	2.54	2.03	0.30	2.29	14.60	1.57	----
Max	8.92	10.30	4.83	0.89	1.53	BSC	2.79	0.50	2.90	15.88	1.83	1.40

Maximum Ratings and Electrical Characteristics

Parameter	Symbol	CDBD1530	CDBD1540	CDBD1545	CDBD1550	CDBD1560	Unit
Max.Repetitive Peak Reverse Voltage	V _{RRM}	30	40	45	50	60	V
Max. DC Blocking Voltage	V _{DC}	30	40	45	50	60	V
Max. RMS Voltage	V _{RMS}	21	28	32	35	42	V
Peak Surge Forward Current 8.3ms single halfsine-wave superimposed on rateload (JEDEC method)	I _{FSM}	150					A
Max. Average Forward Current	I _O	15					A
Max.Forward Current at 7.5A T _j =25 ^o C T _j =100 ^o C	V _F	0.55 0.48			0.65 0.57		V
Max. DC Reverse Current at Rated DC Blocking Voltage T _a =25 ^o C T _a =100 ^o C	I _R	1.0 50					mA
Typical ThermalResistance (Note 1)	R _{θJC}	30					°C/W
Operating Junction temperature	T _j	- 50 to + 125					°C
Storage Temperature	T _{STG}	- 65 to + 150					°C

Note 1: Thermal resistance from junction to Case.

Rating and Characteristic Curves (CDBD1630 Thru CDBD1660)

Fig. 1 - Reverse characteristics

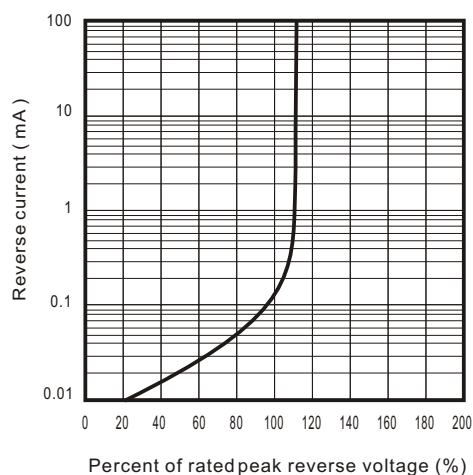


Fig.2 - Forward characteristics

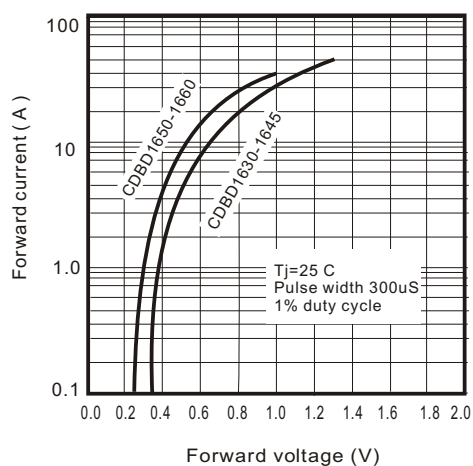


Fig. 3 - Junction capacitance

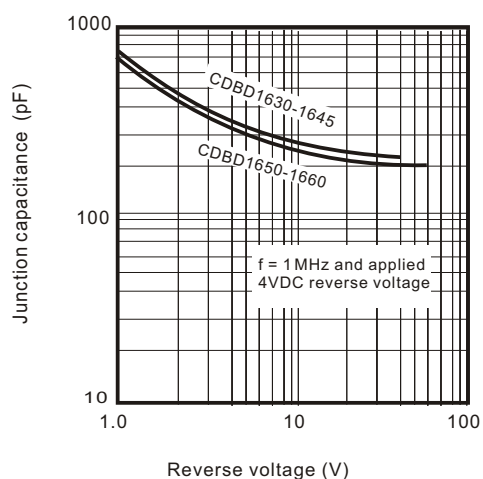


Fig. 4 - Current derating curve

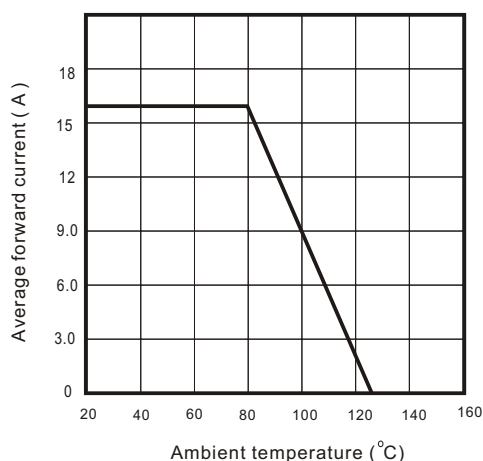


Fig. 5 - Non repetitive forward surge current

