



DFD30T

Diffused Junction Type Silicon Diode

3.0A Power Rectifier

Features

- High-speed switching use
- Reverse recovery time $trr = 0.15\mu s$ max (B,C,E,G)
 $trr = 0.3\mu s$ max (J,L)
- Peak reverse voltage $V_{RM} = -100$ to $-1000V$
- Average rectified current $I_0 = 3.0A$

Absolute Maximum Ratings at $T_a = 25^\circ C$

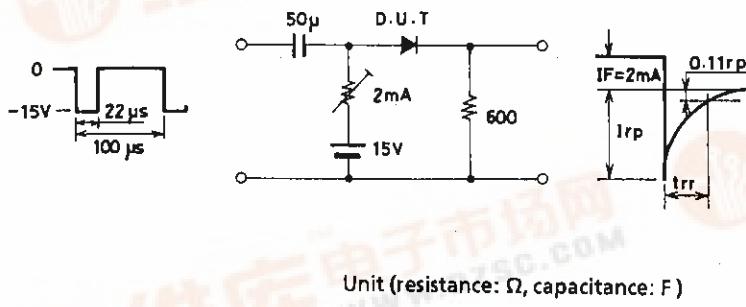
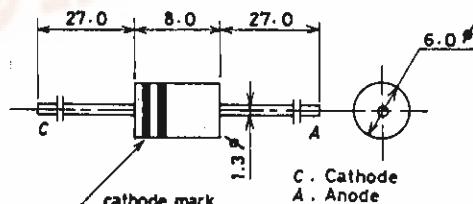
		DFD30TB	DFD30TC	DFD30TE	DFD30TG	unit
Peak Reverse Voltage	V_{RM}	-100	-200	-400	-600	V
Average Rectified Current	I_0	$T_a = 25^\circ C$	→	→	→	3.0 A
Surge Forward Current	I_{FSM}	50Hz sine wave, 1 cycle	→	→	→	140 A
Junction Temperature	T_j		→	→	→	150 $^\circ C$
Storage Temperature	T_{stg}		→	→	→	-40 to +150 $^\circ C$

		DFD30TJ	DFD30TL	unit
Peak Reverse Voltage	V_{RM}	-800	-1000	V
Average Rectified Current	I_0	$T_a = 25^\circ C$	→	A
Surge Forward Current	I_{FSM}	50Hz sine wave, 1 cycle	→	A
Junction Temperature	T_j		→ 125	$^\circ C$
Storage Temperature	T_{stg}		→ -40 to +150	$^\circ C$

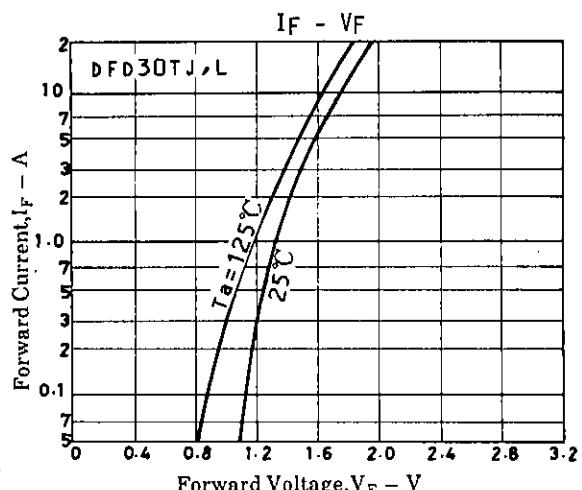
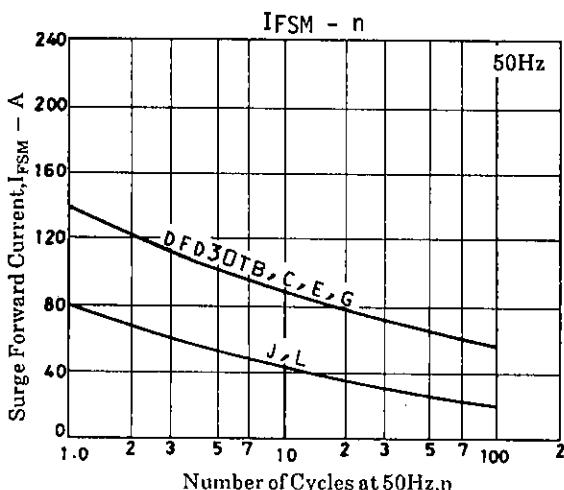
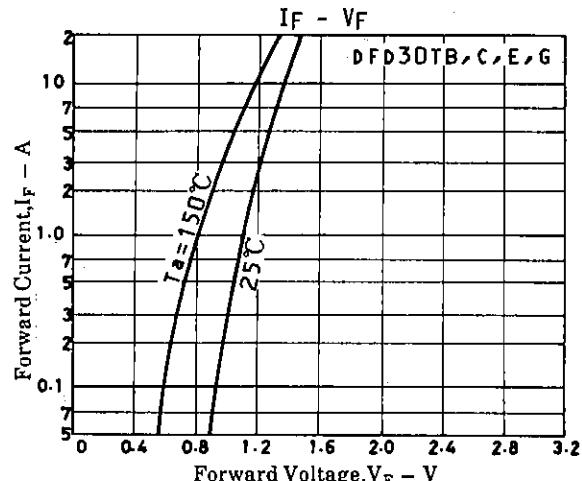
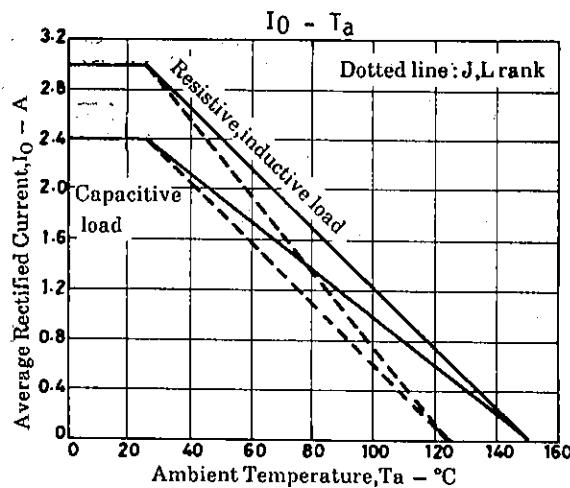
Electrical Characteristics at $T_a = 25^\circ C$

			min	typ	max	unit
Forward Voltage	V_F	$I_F = 3.0A$ (B,C,E,G)			1.2	V
		$I_F = 3.0A$ (J,L)			1.5	V
Reverse Current	I_R	V_R : At each V_{RM}			-20	μA
Reverse Recovery Time	trr	$I_F = 2mA, V_R = -15V$ (B,C,E,G)			0.15	μs
		$I_F = 2mA, V_R = -15V$ (J,L)			0.3	μs

Reverse Recovery Time Test Circuit

Package Dimensions
(unit: mm) 1177

DFD30T



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