

# SHINDENGEN

## Schottky Rectifiers (SBD)

Single

# DE10P3

## 30V 10A

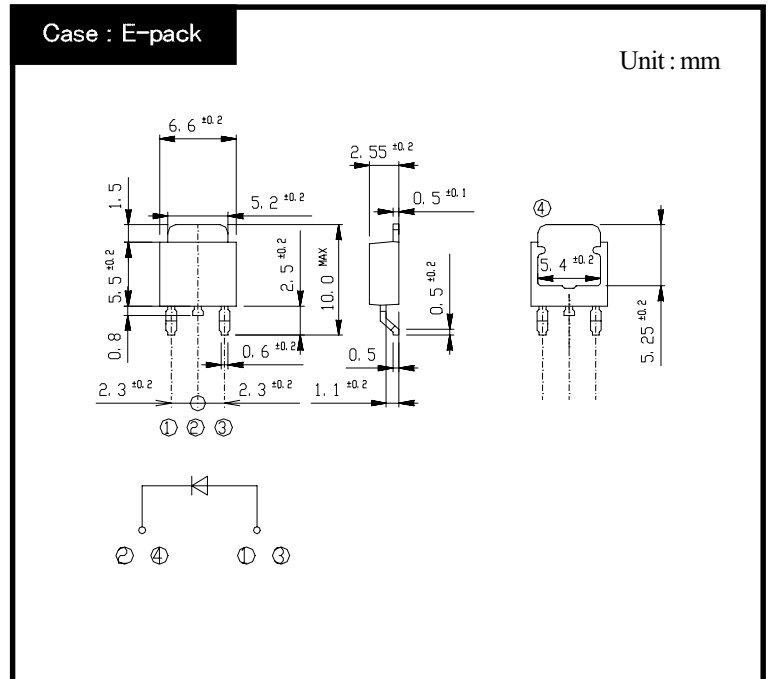
### FEATURES

- SMT
- Super low  $V_F=0.4V$
- High current capacity with Small Package

### APPLICATION

- Reversed Battery Connection Protection
- DC OR output
- DC/DC converter
- Mobile telephone, personal computer

### OUTLINE DIMENSIONS



### RATINGS

- Absolute Maximum Ratings (If not specified  $T_c=25^\circ C$ )

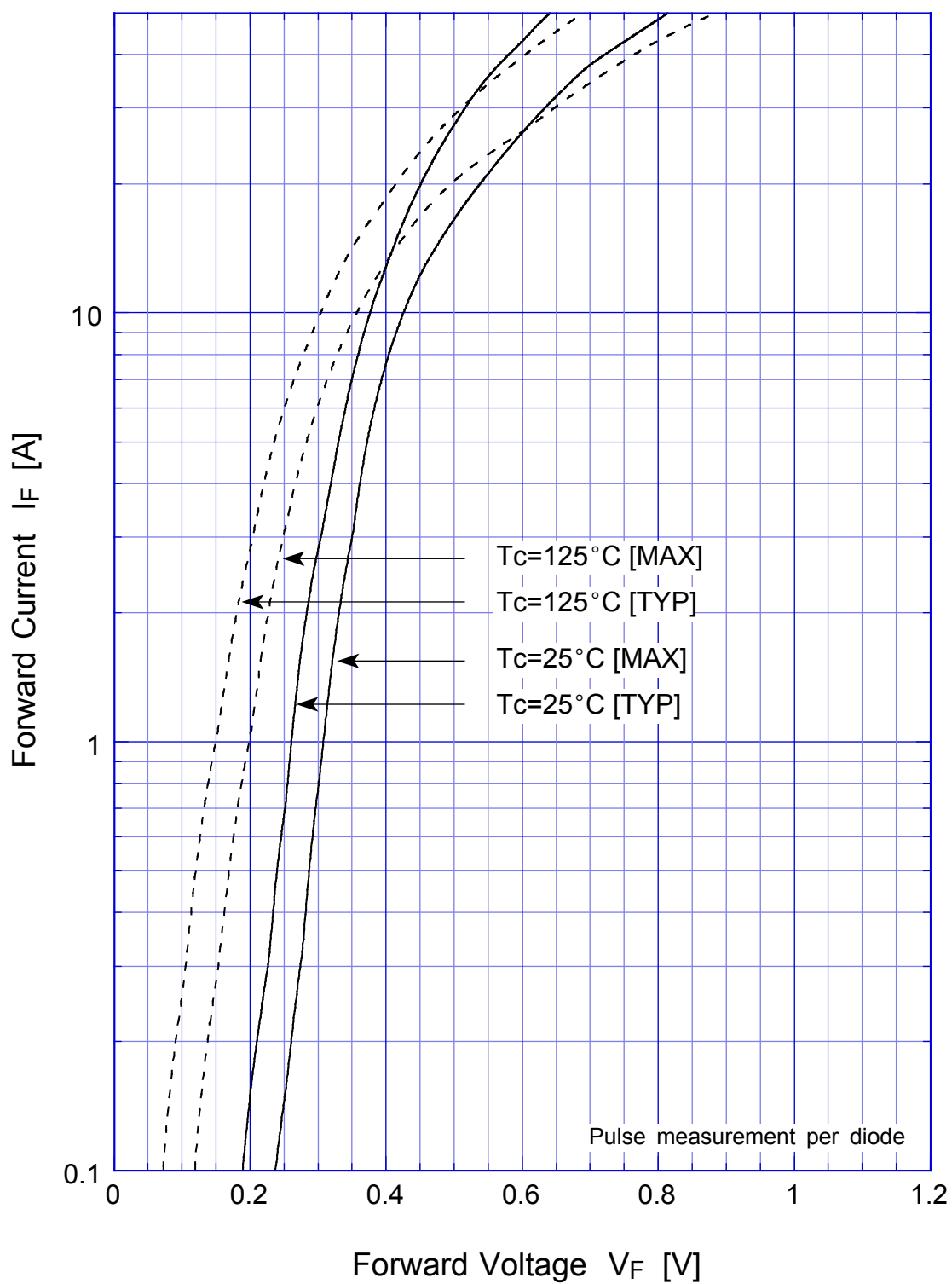
Item	Symbol	Conditions	Ratings	Unit
Storage Temperature	$T_{stg}$		-55~125	$^\circ C$
Operating Junction Temperature	$T_j$		125	$^\circ C$
Maximum Reverse Voltage	$V_{RM}$		30	V
Repetitive Peak Surge Reverse Voltage	$V_{RRSM}$	Pulse width 0.5ms, duty 1/40	35	V
Average Rectified Forward Current	$I_O$	50Hz sine wave, R-load $T_c=95^\circ C$	10	A
Peak Surge Forward Current	$I_{FSM}$	50Hz sine wave, Non-repetitive 1 cycle peak value, $T_j=25^\circ C$	200	A

- Electrical Characteristics (If not specified  $T_c=25^\circ C$ )

Item	Symbol	Conditions	Ratings	Unit
Forward Voltage	$V_F$	$I_F=8A$ , Pulse measurement	Max.0.40	V
Reverse Current	$I_R$	$V_R=V_{RM}$ , Pulse measurement	Max.25	mA
Junction Capacitance	$C_j$	$f=1MHz$ , $V_R=10V$	Typ.600	pF
Thermal Resistance	$\theta_{jc}$	junction to case	Max.4.0	$^\circ C/W$

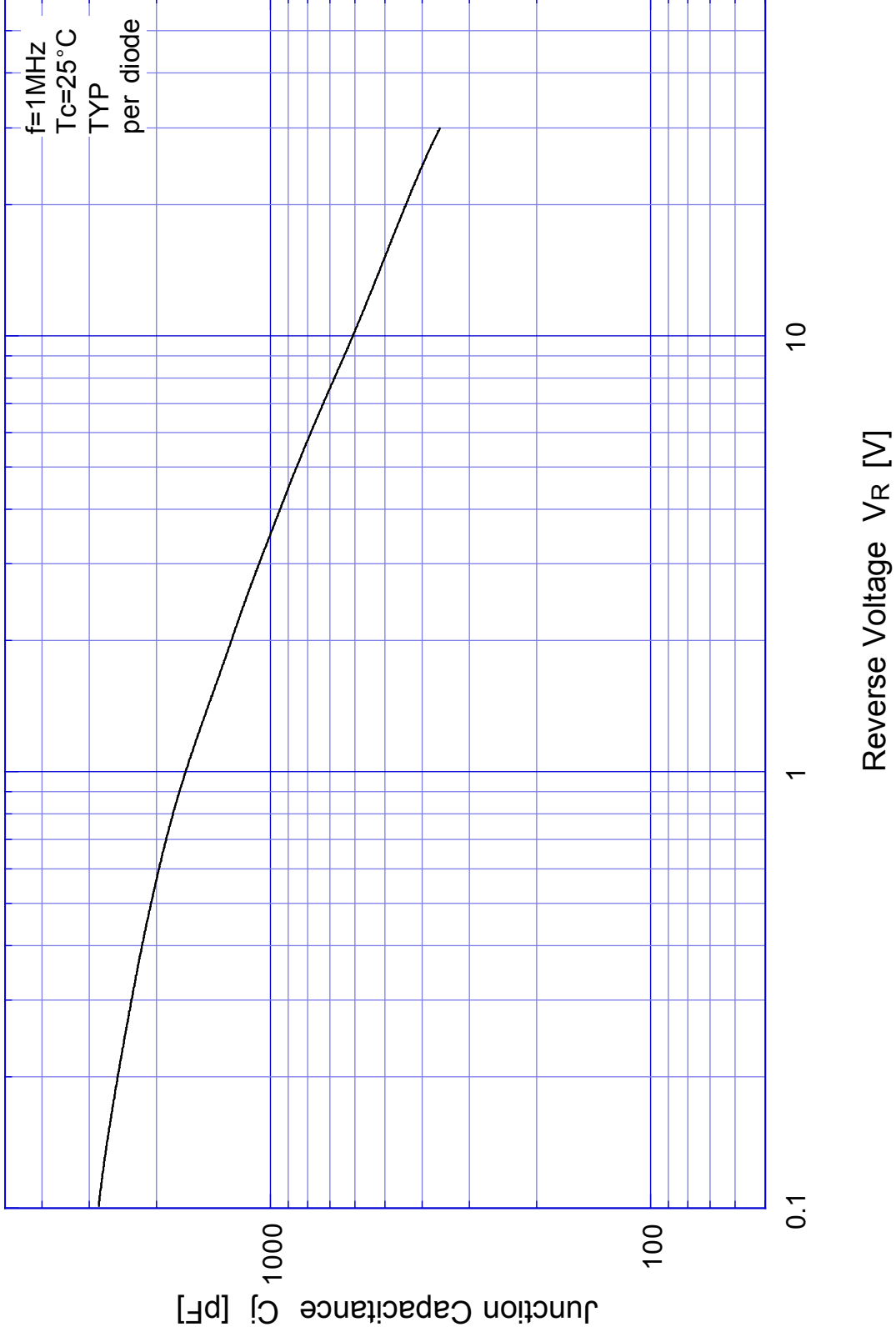
# DE10P3

# Forward Voltage



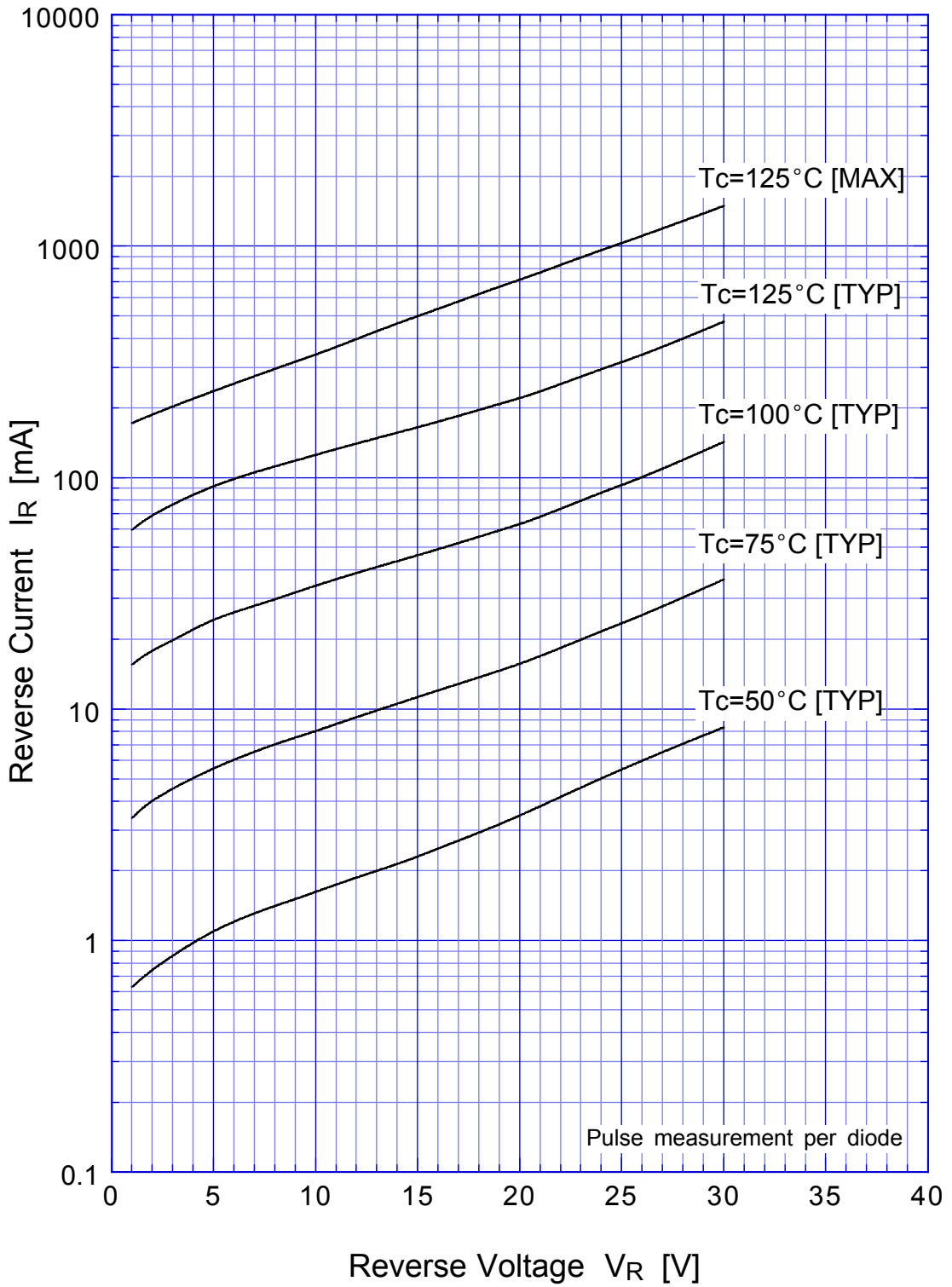
# DE10P3

## Junction Capacitance

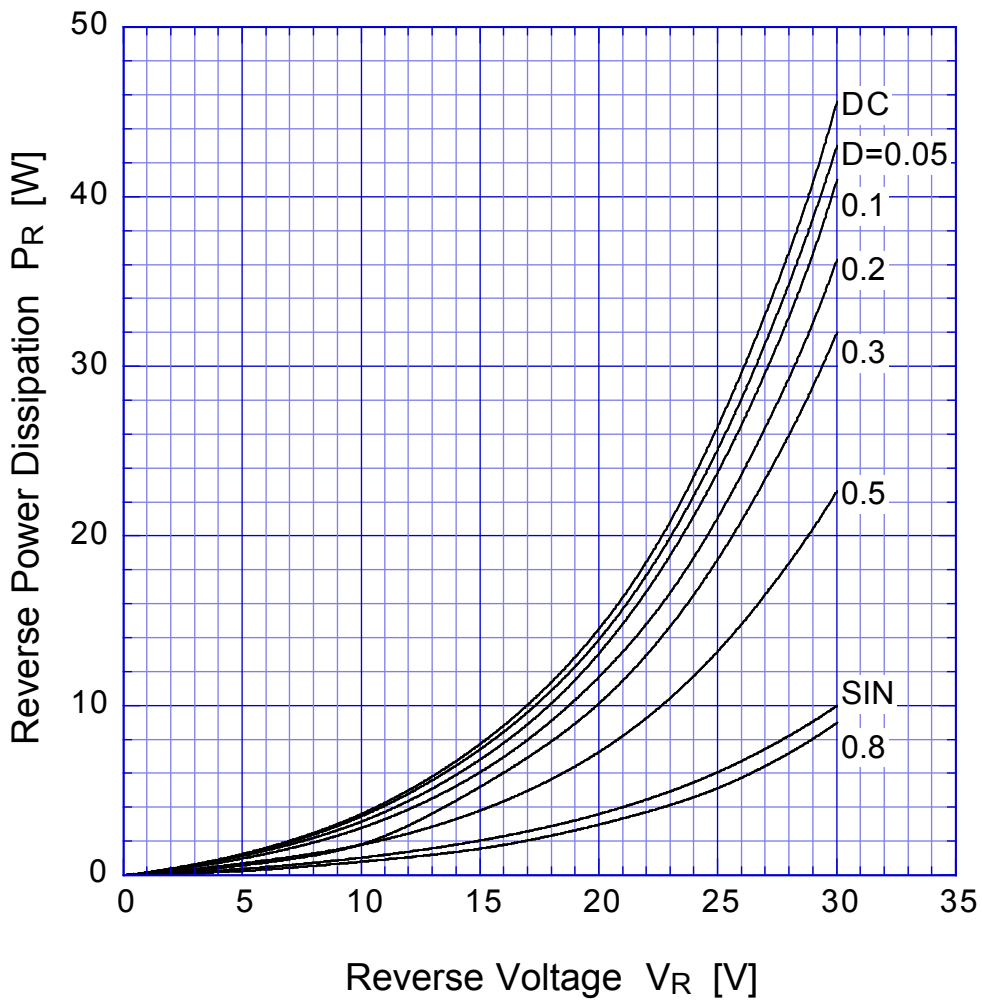


# DE10P3

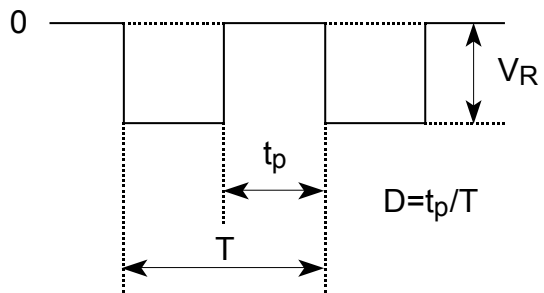
# Reverse Current



# DE10P3 Reverse Power Dissipation

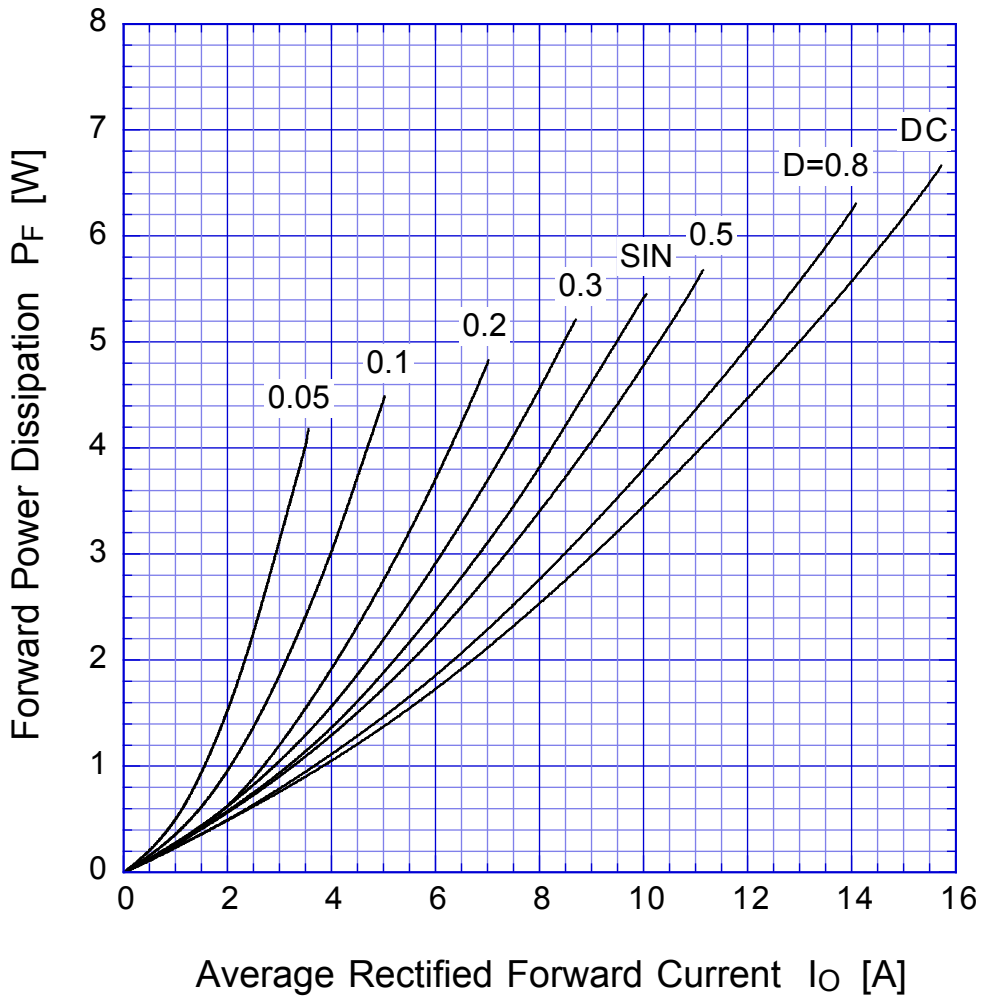


$T_j = 125^\circ\text{C}$

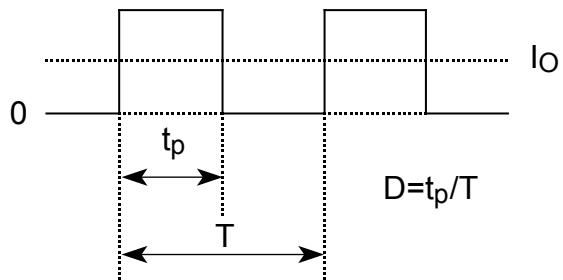


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## Forward Power Dissipation

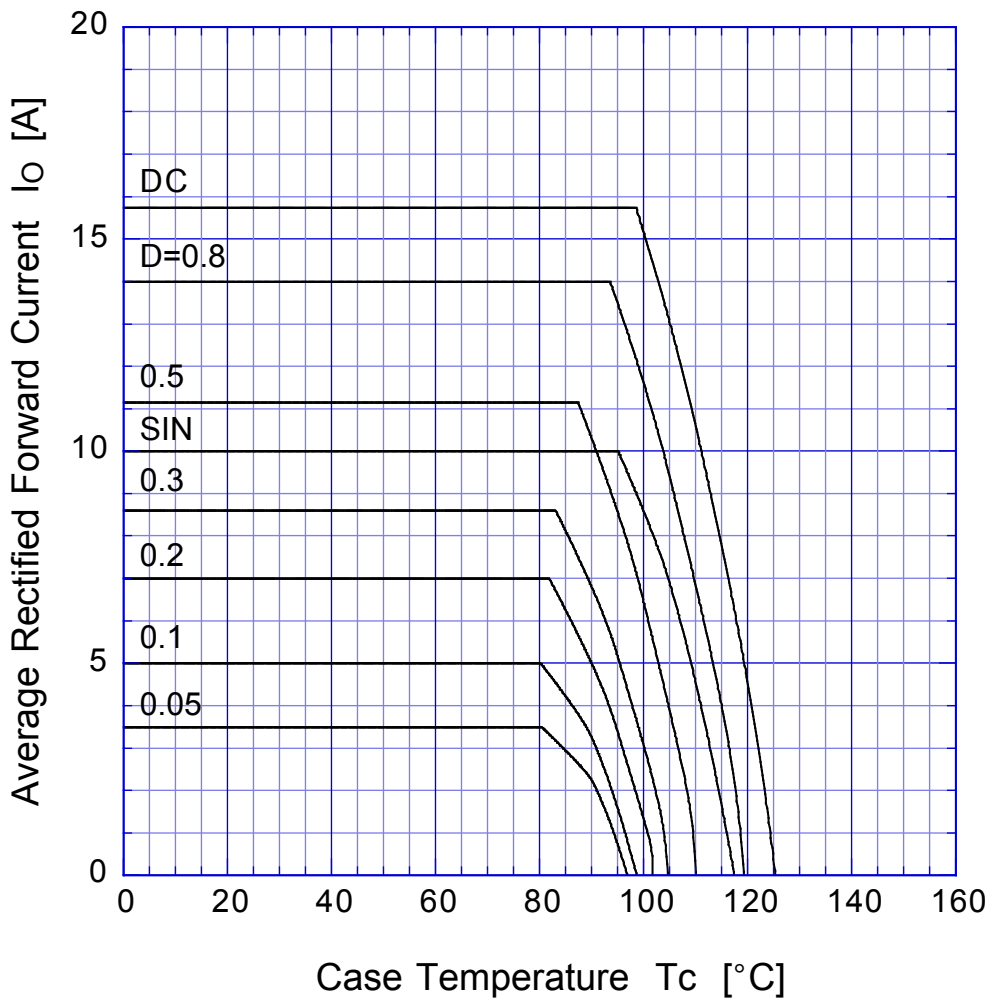


$T_j = 125^\circ\text{C}$



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# Derating Curve



$V_R = 15V$



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## Peak Surge Forward Capability

