



快恢復整流二極管 Fast Recovery Rectifier Diodes

特徵 Features

$I_{F(AV)}$ 1.0A
 V_{RRM} 50V~1000V
 t_{rr} 0.15 μ s , 0.25 μ s , 0.5 μ s
 高可靠性 High reliability

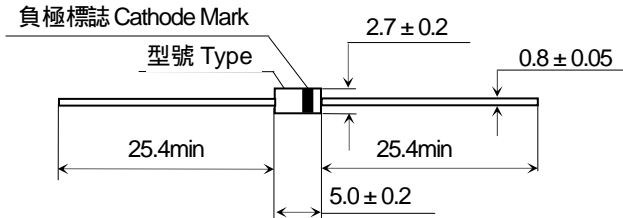
外形尺寸和印記 Outline Dimensions and Mark

單位 Unit : mm



用途 Applications

快速整流用
 High speed switching



極限值 (絕對最大額定值)

Limiting Values (Absolute Maximum Rating)

參數名稱 Item	符號 Symbol	單位 Unit	TFR101	TFR102	TFR103	TFR104	TFR105	TFR106	TFR107
反向重複峰值電壓 Repetitive Peak Reverse Voltage	V_{RRM}	V	50	100	200	400	600	800	1000
反向工作峰值電壓 Peak Working Reverse Voltage	V_{RWM}	V	50	100	200	400	600	800	1000
反向不重複峰值電壓 Non-Repetitive Peak Reverse Voltage	V_{RSM}	V	75	150	220	440	660	880	1100
正向平均電流 Average Forward Current	$I_{F(AV)}$	A	1.0	(正弦半波 50Hz, 電阻負載, $T_{break}=50$) (50Hz Half-sine wave, Resistance load, $T_{break}=50$)					
正向 (不重複) 浪湧電流 Surge(Non-repetitive)Forward Current	I_{FSM}	A	30	(正弦半波 50Hz, 一個周期, $T_a=25$) (50Hz Half-sine wave, 1 cycle, $T_a=25$)					
結溫和貯存溫度 Junction and Storage Temperature	T_j, T_{stg}		-40 ~ +150						
工作環境溫度 Operating Ambient Temperature	T_a		-40 ~ +150						

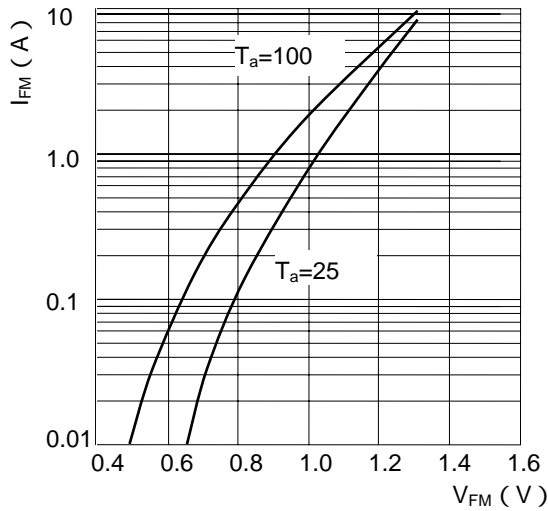
電特性 ($T_a=25$ 除非另有規定)

Electrical Characteristics ($T_a=25$ Unless otherwise specified)

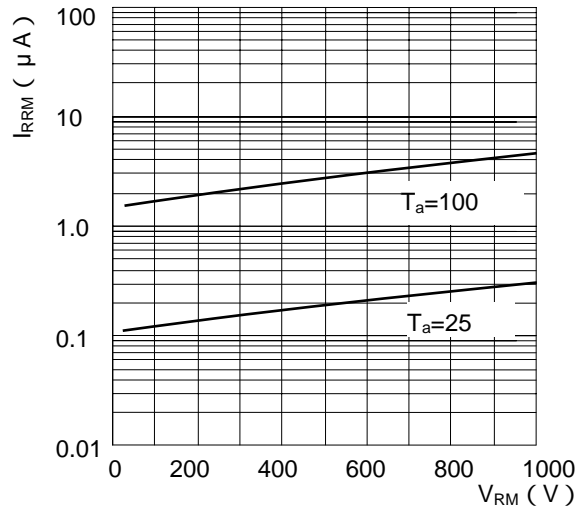
參數名稱 Item	符號 Symbol	單位 Unit	測試條件 Test Condition	最大值 Max						
				TFR						
				101	102	103	104	105	106	107
正向峰值電壓 Peak Forward Voltage	V_{FM}	V	$I_{FM}=1.0A$	1.3						
反向峰值電流 Peak Reverse Current	I_{RRM1}	μ A	$V_{RM}=V_{RRM}$	$T_a=25$						
	I_{RRM2}			$T_a=100$						
反向恢復時間 Reverse Recovery Time	t_{rr}	μ s	$I_F=0.5A$ $I_R=1A$ $I_{RR}=0.25A$	0.15		0.25		0.5		
熱阻(典型) Thermal Resistance (Typical)	R_{J-A}	/W	結和环境之間 Between junction and ambient	55						
	R_{J-L}		結和引線之間 Between junction and lead	25						



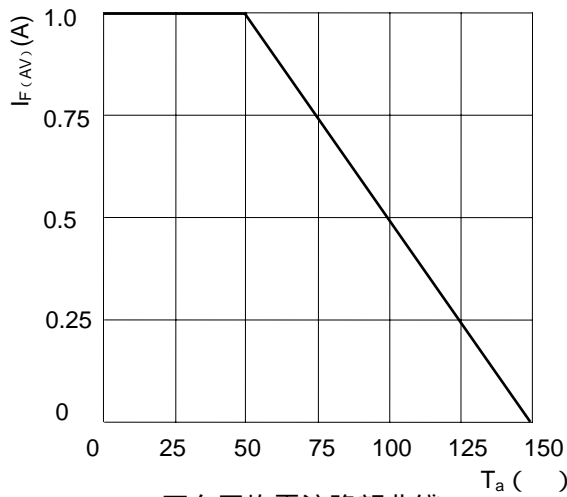
特性曲線 (典型) Characteristics(Typical)



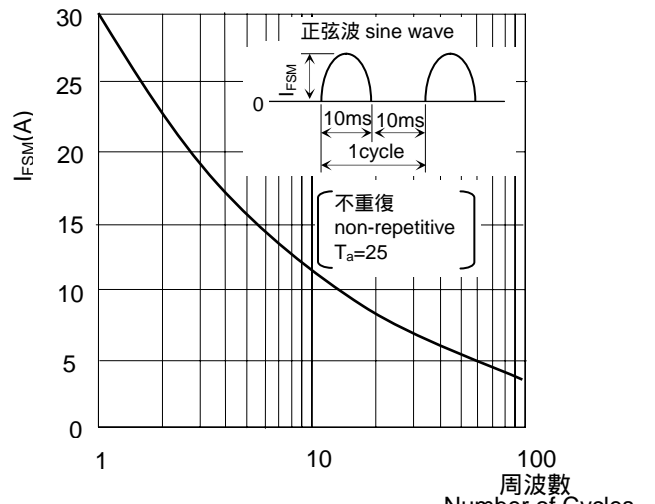
正向特性
Forward Characteristics



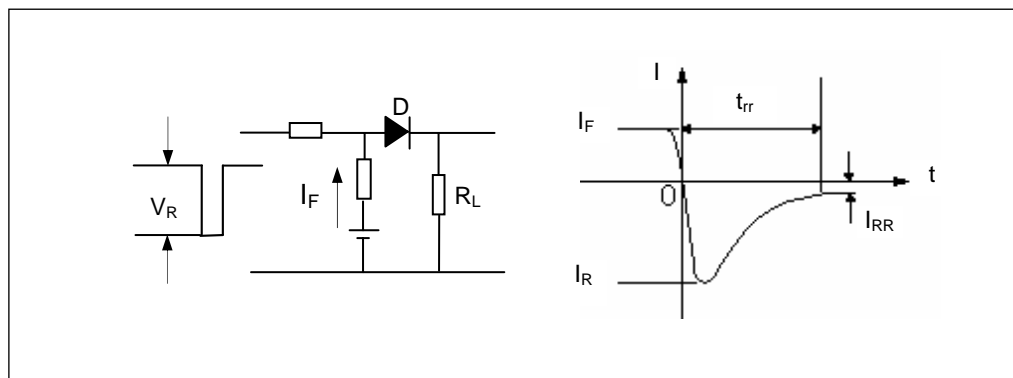
反向特性
Reverse Characteristics



正向平均電流降額曲線
 $I_{F(AV)} - T_a$ Derating



耐正向浪湧電流能力
Surge Forward Current Capability



反向恢復時間 t_{rr} 試驗電路及測試波形示意圖
Diagram of Circuit and Testing Wave form of Reverse Recovery Time t_{rr}