



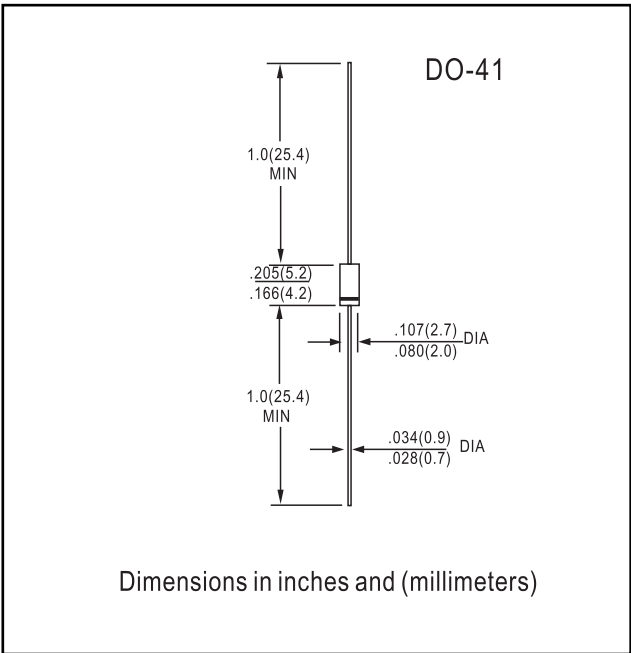
# TAYCHIPST SCHOTTKY BARRIER DIODE

**ERA83-004**  
40V 1.0A

- FEATURES**
- High current capability
  - High surge current capability
  - High reliability
  - High efficiency
  - Low power loss
  - Low forward voltage drop
  - Low cost

## MECHANICAL DATA

Case : DO-41 Molded plastic  
 Epoxy : UL94V-O rate flame retardant  
 Lead : Axial lead solderable per MIL-STD-202,  
 Method 208 guaranteed  
 Polarity : Color band denotes cathode end  
 Mounting position : Any  
 Weight : 0.339 gram



## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

● Absolute maximum ratings

Item	Symbol	Conditions	Rating	Unit
Repetitive peak reverse voltage	$V_{RRM}$		40	V
Non-repetitive peak reverse voltage	$V_{RSM}$	$t_w=500ns, duty=1/40$	48	V
Average forward current	$I_{F(AV)}$	Square wave, $duty=1/2$ $T_I=115^{\circ}C$	1.0*	A
Surge current	$I_{FSM}$	Sine wave 10ms	50	A
Operating junction temperature	$T_j$		-40 to +150	$^{\circ}C$
Storage temperature	$T_{stg}$		-40 to +150	$^{\circ}C$

● Electrical characteristics ( $T_a=25^{\circ}C$  Unless otherwise specified)

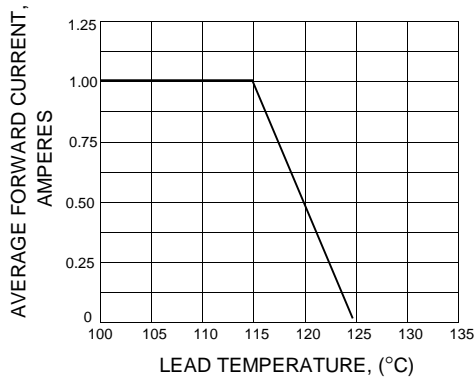
Item	Symbol	Conditions	Max.	Unit
Forward voltage drop	$V_{FM}$	$I_{FM}=1A$	0.55	V
Reverse current	$I_{RRM}$	$V_R=V_{RRM}$	2.0	mA



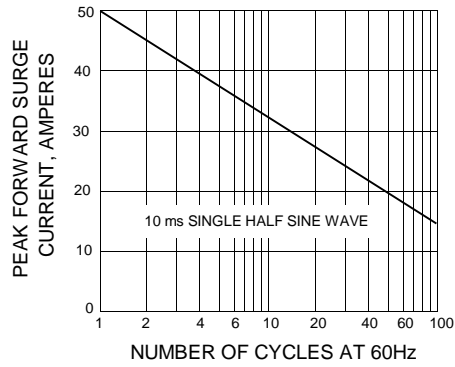


**RATINGS AND CHARACTERISTIC CURVES ERA83-004**

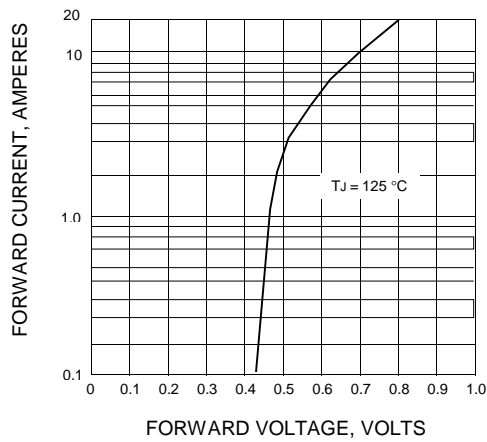
**FIG.1 - FORWARD CURRENT DERATING CURVE**



**FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT**



**FIG.3 - TYPICAL FORWARD CHARACTERISTICS**



**FIG.4 - TYPICAL REVERSE CHARACTERISTICS**

